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MOBILE

AND

NORTH-WESTERN RAILROAD.

PROJECT.

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Mobile and North-Western Railroad Company.

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Executive Committee.

W. D. MANN, *Chairman.*
JOHN H. GARNER,
L. SCRANTON,
THE PRESIDENT, (*ex-officio.*)

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By request of the Board of Directors of the Mobile and North-western Railroad Company, Colonel W. D. Mann, the originator of the enterprise, has prepared a report upon the project in detail, which, together with the accompanying documents—report of the Chief-Engineer, map of the route and connections, copy of the charter of the company, and various legislative acts and ordinances relating to the company, and miscellaneous memoranda—is published for the benefit of those interested in the subject. Particular attention is invited to the very carefully prepared map of the line, with the connections, the accuracy of which is guaranteed by the well-known publishers G. W. & C. B. Colton & Co.; and to the report of General A. A. Humphreys, Chief-Engineer U. S. Army, showing the great wealth and resources, and the practicability of leveeing effectually the Yazoo basin, or Mississippi bottom, the whole length of which is bisected by the proposed road. (Appendix D.)

THE BOARD OF DIRECTORS.

PROJECT.

REPORT OF COLONEL W. D. MANN.

To the President and Board of Directors of the Mobile and North-western Railroad Company:

GENTLEMEN: In response to your request that I should prepare a report on the project you have in hand, a great railroad to the North-west, for the information of parties who may be or may become interested in the work, I have the honor to respectfully submit a brief outline of the subject, though with the sense that, forced to curtail to a length that should not weary the reader, I shall do but half justice to an undertaking which, in importance of promised results, is second to but few, if any, of the great works of internal improvement of this continent.

THEORY, ORIGIN, AND OBJECTS OF THE PROJECT.

Tendency of the products of any country toward their market is a law of commerce, and hence those lines of transportation which, heeding this, are laid from the producing regions, in the most direct and natural course toward the market of the products, have been, and must ever be, great pecuniary successes. As the market of the surplus productions of the great West is Europe, east, the lines of railway from west to east, in the immense proportion to which they have grown, are notable examples of the truth of this theory. A few lines running north and south have proven highly prosperous undertakings—as, for remarkable instance, the Illinois Central Railway—but this, in truth, is a line leading directly toward the market, in this, that it takes the vast crops of the broad prairies of that State to water transportation, on which they take their easterly course. The market of the great staple of the South is Liverpool, and lines which most directly and economically unite its fields with that market must be profitable in their development. In this theory the Mobile and North-western Railroad project had its origin in my mind. The vast, incomparably rich fields of Western Mississippi, North-Louisiana, Texas, Arkansas, and Missouri, capable of producing cotton for the whole world, demand more direct outlet toward Liverpool. Mobile, though not in the direct line, yet offers by far the nearest and most direct line of transit, from its nearness to the producing region shortening the rail transportation, and from the excellence of its harbor as a port for the great ships engaged in the cotton traffic. To all the region named, Mobile is the nearest seaport.

A railway with its branches and connections joining all sections of that region to this seaport, must prove an immense pecuniary success. How thoroughly the proposed enterprise accomplishes this, will be seen on recitation of the routes of the main trunk road and its principal branches, together with the ultimate connections. Glancing at the map, it is seen that a main trunk road is proposed from Mobile north-westerly on almost an air-line to Jackson, a point on the New-Orleans and Great Northern road which is here intersected and tapped. It also here intersects the road leading due west to Marshall, Texas, the eastern terminus of the Southern Pacific Railroad. The vast trade of this line is thus tapped and drawn over our trunk-line to Mobile and the sea. From Jackson it takes an almost due north course to Helena, Ark., where we connect with a railroad now rapidly building due north to its junction with the St. Louis and Iron Mountain road, now constructed and operated to near the Missouri south line. Thus the chief city of the North-west, St. Louis, and all its numerous lines of railways diverging to every quarter of the North and West, is brought into direct connection with its natural seaport, Mobile. Again, from Helena a road is projected and in process of construction to Kansas City, due north-west, in the centre of the Missouri River valley. Also, is a road from Helena to Little Rock far advanced toward completion. Returning, we find an important branch extending on up the Yazoo delta or basin to the thriving city of Memphis, and there connecting with several roads northward. Further down at Yazoo City, a western division of our road bisects the western portion of the Yazoo basin to Napoleon, Ark., and thence over the Little Rock and Pine Bluff road, partially completed at this date, connects with the capital of the fertile State of Arkansas, and, further on, over the Little Rock and Fort Smith road, with the Indian Territory, soon to be developed into one of the richest producing sections of the country. From a point on Bowie Creek, a branch due west joins us, traversing a very fertile region, with the city of Natchez, and opening to us, by roads contemplated and soon to be built, the sugar and cotton fields of the Red River and Central Louisiana. A branch through the fine counties of Rankin and Madison opens their trade to our trunk line, and gives a connection directly north, and with Louisville over the Mississippi Central road. Taking the entire system in view, and a great railroad tree is seen, its branches embracing a territory in extent nearly the entire Mississippi Valley, its trunk leading down and finding base in a fine seaport, directly in the natural line of the commerce of that region with the world.

But the immediate local traffic which the road promises to have, should be considered, for in this business lies largely the secret of railroad profits. The local business will be, in addition to the passenger traffic incident to a rich and fairly well-peopled region throughout, and the freights from the distribution of the articles of general merchandise for local consumption, the transportation of lumber, cotton, grain, meats, and live stock, mainly. After leaving Mobile fifteen miles, an almost virgin yellow pine forest, perhaps unequaled in size of trees and quality, is traversed for a distance of one hundred and twenty miles. The value of this timber is well known. The demand for it, both for export abroad and in the comparatively timberless regions of the North-west, is unbounded; and the supply is practically inexhaustible along the line of the road. The carrying of lumber and timber will

form an important part in the road's traffic for very many years. From this timber region we pass directly into the cotton belt, both with the main line and all the branches. No finer cotton-growing region is known than all this portion of Mississippi; and the Yazoo basin, traversed by the trunk road and western division, has no equal in the richness of its cotton fields. It has been reliably estimated that this basin or delta alone, when fully developed, could produce more cotton than is now grown in the world. At present, with the comparatively light improvement, incident to want of facilities of transportation, of the regions we shall traverse with main line and branches, there is produced, adjacent to the road, more than a quarter of a million bales of cotton, nearly every pound of which will necessarily be moved by this road, from the superior facilities it will offer over any other outlet.

As is well known, because of the greater profit of cotton culture, but comparatively small quantities of grain or meats are produced in all this region; and no work-animals, mules or horses, are grown. Our road, in its connections, penetrates the grain and stock-raising fields of the North-west; and immense freights of flour, corn, bacon, pork, horses, and mules to supply this region, may be expected from the West southwardly. And here I will remark, that by no means do I deem that with the carrying of grain southward for home consumption will our grain-freights end. For the six months of the year directly after the harvest in the West, the water transportation to the East is closed, and grains must either be held at cost of interest, storage, and insurance, or must be sent forward by rail. The length of this mode of transportation to ports of the East from the grain-fields west of the Mississippi is more than double the distance to Mobile. With the deepening of the channel to the city of Mobile from the lower anchorage, now rapidly progressing, so that large ships may come up, I look to see grain elevators erected at Mobile; and this road is destined to transport immense quantities of grain in bulk for export. But there are other objects than the transportation of the productions of its tributary region to Mobile for export, and the local interchange of these productions, which this road has—other sources of traffic and revenue.

The consumption in the Mississippi valley of the staple articles of West-Indies and South-American production, coffee, sugar, molasses, and tropical fruits, is something immense. Looking again to the map, it is seen that Mobile is the natural gateway for the introduction of these products to the entire Mississippi valley and the North-west, lying, as it does, in the direct and shortest line of transit. With the increased facilities for the distribution of these articles, which the ramifications of our proposed road and its connections will give, I confidently look to see almost the entire importation of these products made *via* Mobile, largely to be distributed over our road. Already this trade is very considerable and rapidly increasing; witness the article of coffee, of which in the commercial year from September 1st to September 1st, 1866–7, Mobile imported less then 9000 bags, while, during the year just closed, she has imported 81,218 bags; and the increase has been steady annually. The sending forward to the North and West of tropical fruits, and the fruits and early vegetables of our own latitude, will form no inconsiderable item of business for the road. But I have said sufficiently of the prospective business of the road to at least direct thought on the subject, which will

develop still other sources of traffic; if, indeed, I have not already shown enough to demonstrate that the Mobile and North-western Railroad must be a profitable enterprise.

CAN THE PROJECT BE SUCCESSFULLY CARRIED TO COMPLETION?

As you are aware, to this date from the inception of the scheme a year ago, nothing but remarkable success has greeted it. Its popularity in our city and along its entire line has been unexampled. The most liberal legislation in both the States of Alabama and Mississippi has been obtained; elaborate surveys have been satisfactorily carried forward until they approach completion; and to-day, with most favorable proposals of contracts, we are about to begin the actual work of construction.

A review of the

FRANCHISES AND GRANTS, (APPENDIX A AND B,)

which the company possesses, will, perhaps, furnish ground for a favorable answer to the question of the successful completion of the project. The charter is certainly remarkably liberal in its every provision, and especially so in the unlimited extent of road contemplated, and the location of the same; in the exemption from taxes of every sort for the long period of thirty years; in the facilities for obtaining right of way; and in the provisions for local aid, both by counties, municipalities, and by individuals. This charter has been confirmed, and the corporations existing in both States consolidated by act of the Legislature of Alabama. (See Appendix A.) One million dollars in the gold or sterling bonds of Mobile, eight per cents, have been duly granted the company. (For ordinances and authority for the same, see Appendix B.) For the character of these bonds, and the financial condition of the city, see report of Joint Committee of City Government, and Auditor's Report. (Appendix C.) The State of Mississippi has passed an act granting all the lands of the State technically known as "swamp lands," together with certain other lands, to this company, at the merely nominal price of two cents per acre, (to comply with the constitution, requiring the lands to be sold at some price,) virtually a donation. The exact aggregate amount of these lands is unknown; but it will exceed one million of acres, and may reach three or four millions of acres, depending upon the action of the General Land Office in reference to allowing further selection of swamp lands, of which there are several millions of acres, and which are all granted us if patented to the State, and upon the decision of the Supreme Court upon the question of our right to lands held by the State under tax-sales purchase. The first section of the act granting lands conveys *all* State lands within twenty miles of the road on either side. Within that belt there are something over one million acres of land held by the State, (see auditor's certificate, Appendix B,) a small fraction of which was under an old act, now repealed, "forfeited" to the State for non-payment of taxes; but the larger parts of these lands are held by regular purchase by the State under tax sales. It is claimed by the counsel of the company, (see elaborate opinion of the Hon. William Yerger, Appendix B,) that the provisions of the act granting us lands, which declares that the same shall not be held to cover lands forfeited to the State for taxes, must be held

to apply only to those few lands "forfeited" under the now repealed act spoken of; and that the lands regularly purchased by the State, under tax sales, are conveyed to the company. The case will be soon tested in the Supreme Court. For full information as to the lands of the company, see act of Legislature making grant, and certificate of the Secretary of State of the amount already secured. (Appendix B.) Reference is also made to the memorial of the Legislature of Mississippi, indorsed by the Mobile Board of Trade, (Appendix B,) urging Congress to make grant of lands owned by the general government.

It is confidently believed that this grant will be made, and if so, it will convey about one and a half millions of acres. The State of Mississippi, by a general act, (Appendix B,) appropriates and grants, as a direct bonus, the sum of four thousand dollars per mile, in cash, for each mile of road, branches, and sidings. This is deemed more liberal aid, being an absolute gift, than the indorsement of the road's bonds for a much larger amount, as is the practice of several States. Probably no other road in the State will be able to comply with the terms of the act, and hence it is quite equivalent to a special act for the benefit of our road. The city of Helena, Arkansas, has voted, by a very decided majority, a grant of one hundred thousand dollars, being the limit allowed by city charter, to our company. Under the 20th section of our charter, application has been or will be made for aid by the counties along the line, aggregating about five and a half millions of dollars. Registration of voters is at this date about completed; the counties have been generally canvassed with result of almost unanimous favor to the voting of the aid asked, and the elections will all have come off on or before the 7th of November next. It is confidently believed that the full amount of aid asked ($5,500,000) will be voted. Of the value of this aid by counties there can be no question, as the total amount proposed is far less than ten per cent of the taxable valuation of property, and the counties uniformly have no prior debt. These counties produce more cotton and have greater resources in the aggregate than any other same number of counties in the State. They are all prosperous, rapidly improving, and, from wealth of soil, capable of vast development. In addition to these public resources which the company has, there has been realized from private subscriptions at Mobile, and elsewhere, the sum of nearly two hundred thousand dollars. Large private solvent subscriptions have been made to the several county committees throughout Mississippi, the amount of which is not yet aggregated, as the committees have not yet ceased canvassing. These subscriptions will be available when work is commenced in the respective counties. The right of way has been obtained gratuitously over nearly the entire preliminary lines run, and will be in all cases obtained without cost. In many instances, labor is volunteered sufficient to clear the roadway through wooded lands.

From all this we deduce that the company has, in addition to a most liberal charter, securing absolute exemption from taxation for its entire property, including its lands, and to a gratuitous right of way, means as follows:

Private cash subscriptions	$200,000
Mobile city aid	1,000,000
Mississippi, $4000 per mile, 620 miles	2,480,000

Mississippi county subscriptions	$5,500,000
Helena city aid	100,000
Total	$9,280,000

To secure which, must be built 620 miles of road, which includes all the projected branches as laid down on map. This is an average of nearly $15,000 per mile, or more than one half the entire probable cost of the road fully equipped. In addition to this, there is the vast grant of lands, the cash value of which can scarcely be estimated now, but which, if properly managed, may be made to pay off a bonded debt of the road of ten thousand dollars per mile.

If we consider only the main line of 350 miles, we have:

Private subscriptions	$200,000
Mobile city aid	1,000,000
Mississippi, $4000 per mile	1,400,000
County and municipal subscriptions	3,350,000
Helena city aid	100,000
Total	$6,050,000

which is over $17,000 per mile, and the entire amount of lands are still secured. All this aid, except the Mississippi county aid, and the Helena aid, is *cash*. One fifth of the county aid will be cash, and the balance twenty-year 8 per cent bonds. While perhaps these may not be found readily salable, yet the instances in which counties in any of the States have failed to pay either interest or principal of their bonds are extremely rare; and half the counties in the United States have at some time or other issued bonds in aid of internal improvements. I regard this class of securities as excellent; but if they are not in demand, I would suggest that the entire sum be placed in the hands of the trustees of the road's bonds, and pledged, with its accruing interest, to the payment of interest and principal of the road's own bonds. The large amount of interest annually accruing from these county bonds would render certain that the interest on the road's bonds would be paid, even though the earnings of the road were light, and thus the company would be enabled to obtain a round price for its own bonds.

The preliminary surveys of the road have now been under progress some five months, with four full and thoroughly equipped parties in the field, and are well advanced. Portions of the road at either end have been located; but for more full information of the engineering department, as well as for the views on the project, of our engineer, Mr. Henry Van Vleck, known to you to be an engineer of large and varied experience and unsurpassed professional repute, I respectfully invite your attention to his report herewith submitted.

Believing, in the space I have allotted myself, I have as faithfully, and without extravagance, set forth our project as I am able to, I have the honor to be very respectfully your obedient servant,

W. D. MANN, *Vice-President.*

MOBILE, Sept. 1, 1871.

REPORT OF THE CHIEF ENGINEER.

MOBILE AND NORTH-WESTERN RAILROAD,
ENGINEER'S OFFICE, JACKSON, MISS., Sept. 1, 1871.

To the President and Directors of the Mobile and North-western Railroad Company:

GENTLEMEN: By direction of W. D. Mann, V. P., I herewith submit a brief report, containing description and topography of the main line of your road, together with statements of approximate amounts of quantities of grading, bridging, etc.; also reference to principal items of traffic, local and through, anticipated upon completion of the enterprise.

You are aware that the surveys are yet in an incomplete state. Preliminary surveys only have been made from Mobile to Yazoo City, and about 20 miles in Coahoma County, at the northern terminus. Profiles and computations from Mobile to Pascagoula River, and from near head of Okatoma Creek to Yazoo City, have been made. These, however, cover all, or nearly all, of the rough ground on the main line; the balance is in the valley of Leaf River and Okatoma Creek, and in the table-lands of Yazoo basin.

Since assuming the duties of my position, I have been constantly occupied in making reconnoissance of country along proposed routes and other engineering details, and have not collected any statistics with reference to traffic, through or local, or of the condition and prospects of the various roads beyond Helena. The statements made are founded upon the information now at hand, and an engineering experience of many years' duration in such matters. I forward it in the belief that it will prove in the end to be substantially correct.

1. LOCATION.

The line of the Mobile and North-western Railway extends from the city of Mobile, in the State of Alabama, to Dowd's Landing, a point on the east bank of the Mississippi River, opposite the city of Helena, Ark.; with an extension line, diverging from main line, at a point about 6 miles easterly from Dowd's, and running up the Yazoo valley to its head, and thence to the city of Memphis, a distance of about 58 miles. The main line, between Mobile and Dowd's, will be 340 to 350 miles in length, (as the adoption of route hereafter may determine.) Branch lines also contemplated: one running from Yazoo City in a north-westerly direction, across the valley or delta, to Upper Deer Creek; thence up this stream and branches—a distance of about 84 miles—to Prentiss, a point on the east bank of the Mississippi, opposite the city of Napoleon, Ark.; and one diverging from main line on the summit between Strong River and Pearl River, in the south part of Rankin County, and running northerly through the county and through the city of Brandon, a distance of about 36 miles, to the city of Canton. There is also another line contemplated, diverging from main line at head of Okatoma Creek, and running west through the cities of Monticello, Brookhaven, and Hamburg, about 110 miles, to the city of Natchez. The line is now graded from Hamburg to Natchez, a distance of 20 miles.

The route projected for the main line commences at Mobile, and runs in a north-westerly direction to and above the junction of Leaf and Chickasawha

Rivers, (forming the Pascagoula River.) Crossing these streams, the route continues up Leaf River, the Bowie and Okatoma Creeks, (tributaries of Leaf River,) to summit between Okatoma Creek and Strong River ; thence down Seller's Creek to and across Strong River, and up Dobb's Creek to the summit between Strong and Pearl Rivers ; thence down Richland Creek to and across Pearl River, in the city of Jackson. At this point the line intersects and crosses the New-Orleans, Jackson, and Great Northern Railroad and the Vicksburg and Meridian Railroad. From Jackson, the route follows up Town Creek ; thence down Bogue Chitto to and across the Big Black River, near the south-west corner of Madison County ; thence up a small creek to the summit between Big Black and Yazoo Rivers ; thence down O'Neal's Creek to the Yazoo valley ; thence up the valley skirting the range of hills to Yazoo City. From Yazoo City, the line as projected runs up the valley, along the base of the hills, about 10 miles ; thence leaving the hills and running nearly north, crossing a deep swamp about two miles wide, to the high lands on Bee Lake ; thence along the east bank of Bee Lake about 3 miles in distance ; thence along the west shore of Little Horse-shoe Lake, and crossing Little River on to Honey Island ; thence, skirting the most western bends of Little River, to the crossing of Yazoo River, at the head of Honey Island or Eagle Lake. From this point, the line continues up the valley, touching the Yazoo River near Shell bluff, running on west side of Roebuck Lake, through McNutt, and 3 miles westward of Minter's ; thence near Trenton and through Jonestown and Mound Place, to Dowd's Landing.

No lines have yet been surveyed in Yazoo valley, save some 20 miles south from Dowd's. The line in the valley as above indicated has been projected from information furnished by the United States land surveys, which give the elevations of surface with reference to high-water mark upon the section lines as surveyed. They are believed to be generally correct, and no difficulty is anticipated in locating the line as laid down in the map from Eagle Lake to Dowd's Landing. There are low swamps about Eagle Lake, extending 2 or 3 miles north, that will require heavy work. South of Eagle Lake crossing of Yazoo down to the base of the hills, there are four low swamps encountered, varying in width from 1 to 3 miles. It is difficult to estimate the amounts of grading upon this part of the line, in the absence of surveys. A good level route above high-water can be obtained by following the base of hills to Tchula, and crossing Little River into Honey Island, and following up the river to Eagle Lake crossing. The objection to this line is an increase of about 4½ miles in distance.

Preliminary surveys have been completed on main line from Mobile to Yazoo City ; also a survey from diverging point on summit of Strong and Pearl Rivers to Yazoo City, *viâ* Brandon and Canton, and from Canton to Tchula, *viâ* Moore's Ferry, Deasonville, Ebenezer, Hickory Springs, and Harlan's Creek. Very thorough instrumental examinations have been made, and are now being made, upon all portions of the line, to obtain the best possible route for final location of the road. Up to this date, over 600 miles of preliminary line has been run on the portions of route east of Yazoo City. The route east of Pascagoula River has been thoroughly examined, and the final location is now progressing. Surveys are being made for change in main line from Augusta, in Perry County, to Tchula, in Holmes County, diverging

near Augusta, and following up the Tallahalla Creek to near Ellisville, the shire town of Jones County; thence crossing to and following up the Okahay Creek in nearly a direct line to Canton. The summits of the streams are higher than the route *viâ* Jackson, and careful surveys are required to determine the practicability of the route. It would be shorter and more direct than the Jackson route; but would lose the benefits of the large local business between Strong River and Yazoo City, and the Yazoo valley to Tchula, and increase the length of the western branch line to Prentiss more than the distance saved upon main line.

2. TOPOGRAPHY.

From Mobile to crossing of Chickasawha River (about 47½ miles) the surface of the country is broken by the ridges and valleys of Big Creek, Dog River, Black Creek, Escatawpa River, and Beaver Creek, which run southerly and across our route, forming a succession of summits with valley depressions from 100 to 200 feet below. The grading upon this portion of the line is the heaviest, proportionally, of any part of the route, and necessitated the adoption of a maximum grade of 31 $\frac{68}{100}$ per mile for the road to bring the amounts and costs within reasonable limits, commensurate with the necessities of the enterprise, and the financial ability of your company. As these maximum grades are generally short, only occurring on each side of sharp summit cuts, they may be lessened or lowered in the future when economy of transit and volume of traffic will justify the expenditure.

The Escatawpa and Leaf Rivers are deep, sluggish streams, 200 to 500 feet in width, with broad bottoms 5000 to 6000 feet wide, and subject to overflow in freshets of 3 to 8 feet in depth on the bottoms.

The valleys of Leaf River, Bowie and Okatoma Creeks are generally broad and smooth, with nearly uniform rise or grade of surface, requiring but light grading, except where occasional points of the hills are cut through to preserve most direct line.

The ascent to the summit between Okatoma and Strong River is pretty smooth and uniform, and the summit is elevated about 250 feet above the valleys; the surface, being piny woods sand loam soil, is much broken and cut up by sharp ravines and ridges, making a rough profile, and the descent down Seller's Creek is of like character. Strong River is about 100 feet wide and 5 feet deep in ordinary stage of water, with rock bottom. The overflow line from freshets is 900 feet wide in the valley, and varying from 1 to 4 feet deep on river bottom.

The valley of Dobb's Creek is quite favorable for route to summit; between Strong and Pearl Rivers, the summit is elevated about 125 feet above the valleys. The summit is broad with an uneven surface, but the cuts and fills are not deep.

The valley of Richland Creek and its branches is broad, with fair uniform surface, and requires but light grading to Pearl River valley. This valley is about 3 miles broad, and where the route is selected, the surface is overflowed by freshets from 5 to 10 feet, and will require heavy bank. The stream is 200 feet wide and 15 feet deep at low water, and 48 feet deep at high water.

From Jackson westward, the valley of Town Creek is very smooth, with

uniform rise of surface about 85 feet in the distance of 6 miles to Bogue Chitto. The head of Bogue Chitto and down the creek for from 2½ to 3 miles is somewhat broken and rough, with moderate cuts and fills; the rest of the valley (14 miles further) is smooth and broad, with light grading to Big Black River.

Big Black is about 200 feet broad, and the valley is 1½ miles broad, and the bottoms are overflowed by freshets to a depth of from 3 to 5 feet. The maximum rise of freshets is about 24 feet.

From Big Black to summit between that and Yazoo River, the country is pretty uniform in surface, rising gradually about 100 feet in 7 miles to the summit, and only broken up by the light valleys of the small creeks tributary to Big Black. At the summit crossing the ridge is narrow and sharp, with a very abrupt descent into a branch of O'Neil's Creek.

The valley of O'Neil's Creek (about 1½ miles from summit) is from 500 to 1000 feet wide, and descends toward Yazoo valley about 12 feet per mile. Heavy work is encountered from the summit down, until grade line reaches surface of valley. The Yazoo valley is about 170 feet below the summit, or about 20 feet lower than valley of Big Black.

The line enters the Yazoo valley 7 miles south of Yazoo City, and continues in the valley all the way to Dowd's Landing, a distance of from 130 to 135 miles. For the topography and general characteristics of the Yazoo Bottom, I refer you to extracts from the report of A. A. Humphreys, Captain in the United States Topographical Engineer Corps, upon the Physics and Hydraulics of the Mississippi River, in Appendix D.

The country for a distance of 140 miles from Mobile westerly, along the route to Strong River, and extending south to the Gulf, and north for from 20 to 50 miles, is a pine forest, sparsely settled, and soil of moderate fertility, except in the valleys of the streams which are rich. The largest proportion, and especially that west of Escatawpa River, and on Leaf River and its tributaries, is the finest virgin forest of yellow pine in the United States. Mast and spar timber of the best, and in quantities sufficient for the shipping of the world, is here waiting facilities for transportation to the sea. The lumber supply—of the finest quality—is practically inexhaustible for our day and generation, and the demand in the great States, north-west, west, and south-west of us, is unlimited by our contemplated railway facilities for supplying these wants. Westward of Strong River, and along the railroad route to Jackson, the growth gradually changes to oak, maple, sweet gum, and hickory timbers, with corresponding increase in the fertility of the soil, making good, rich, upland cotton soil.

The same character of growth continues from Jackson to Yazoo valley, and the country is well improved and has a large producing capacity. The valley of the Big Black and its numerous branches is very rich soil and well developed.

The alignment of the route is excellent, admitting of long tangents, and curves of large radii, generally not less than 5760 feet radius; in a few instances, on summits and rough ground, radii of 2880 feet have been used. I regret that the unfinished condition of the surveys prevents giving accurate tables of grade and alignment. I append hereto table of aggregate rise and fall of grades, made up roughly from the field-notes and profiles now made:

final location of line and accurate adjustments of grade lines will change these figures more or less:

	No. of Miles.	Total Rise of Grade Ascending.	
		East.	West.
Between Mobile and Enon	88	632	756
" Enon and Jackson	95	387	534
" Jackson and Yazoo City	45	445	284½
" Yazoo City and Dowd's Landing	124	400	470
Totals	352	864	2044½

3. CONSTRUCTION QUANTITIES.—CLEARING THE RIGHT OF WAY.

The plan of construction provides that a space of 100 feet wide shall be cleared from all trees, brush, logs, etc.

Of the 350 miles of main line, I estimate that

From Mobile to Jackson there will be.....150 miles of clearing.
From Jackson to Yazoo City there will be.....20 " "
From Yazoo City to Dowd's Landing there will be...100 " "

Total.....270 miles, or 3240 acres.

GRADING.

First division, 88 miles from Mobile to Enon. The quantities are computed from profiles of the preliminary line, and the total excavation and bank quantities give an average of 40,000 cubic yards per mile, and an aggregate of..... 3,500,000

Part of second division, 50 $\frac{72}{100}$ miles from Enon to foot of rough ground east of Okatoma Creek summit. The quantities for this portion are roughly estimated from the field-notes, no profiles being made. The total quantities of excavation and bank average 18,000 per mile, and the aggregate yards..... 913,000

Part of second and third division, 88½ miles from Okatoma Creek to Yazoo City. This portion of the main line comprises all the summits and nearly all the rough ground encountered on the line west of Pascagoula River. Maps and profiles of preliminary lines have been made, and the quantities computed. The total excavation and bank average about 27,000 yards per mile, and the aggregate cubic yards to..... 2,300,000

Part of third and all of fourth divisions, about 124 miles, from Yazoo City to Dowd's Landing.

If the grade lines are elevated so as to be above all contingency of overflow from crevasse waters of the Mississippi River, and floods of the Yazoo combined, the average quantities per mile will be from 16,000 to 17,000 cubic yards.

I do not think that sound policy requires this height of grade at this time. The highest water-mark known, at Greenwood, (about 35 miles north in a direct line of where our line enters the Yazoo

basin,) occurred in 1858, and was 48 feet above low water. The causes were unusual and unprecedented; a long-continued and extraordinary rain-fall had flooded the Yazoo River and filled all the swamps with water, prior to the great flood in the Mississippi River; the levees were down generally, and the waters of the Mississippi flowed in on the accumulation of the Yazoo flood. The upland grounds on our line of location were nearly submerged, the height ranging from 2 feet above to 4 to 6 feet below high-water mark. The Yazoo basin is about 186 miles long in a right line, and has a grade or fall, corresponding to fall in Mississippi River, of 120 feet. The greatest rise of water at the foot of basin, Vicksburg, is 49 feet, say 50 feet. This elevation would back the Mississippi flood-waters up the Yazoo River and its tributaries $\frac{5}{12}$ of 186, equal to say 80 miles, and would reach the latitude of Greenwood, leaving the surface of uplands forty feet above these flood-waters, provided no Mississippi water came from above down the Yazoo basin. The consequences of the flood of 1858 to property in Yazoo basin induced vigorous action on the part of the State of Mississippi, and the levees were rebuilt, all the outlets above closed, and so remained till 1862. During the war all these outlets were opened, and levees in places of low banks cut by the military, allowing the Mississippi floods to deluge the Yazoo bottom.

Owing to the unsettled state of political affairs since the close of the war, nothing has been done toward repairing those levees until this year. The Mississippi Legislature in March last instituted measures and provided ample means for making the most permanent levee protection for all the Yazoo basin against the flood-waters of the Mississippi, and the work is now vigorously progressing, and will be substantially completed before the floods of 1873.

Grade line adopted on the basis of this protection will give an average of 10,000 to 11,000 c. yards per mile. Say in the aggregate. 1,350,000

Total aggregate cubic yards..... 8,143,000

Being an average for whole of main line of 23,130 cubic yards per mile.

BRIDGING.

With the exception of in Holmes and Rankin Counties, there is no rock or stone within practical distance of our line. Brick are plentiful and of good quality, but the difficulty and cost of transportation to location of structures forbid their use to any considerable extent.

The plan of construction contemplates use of timber for foundations and superstructure of bridges.

From Mobile to Jackson, yellow pine timber will be used; the cost will be very low for delivery of materials, say $12 to $15 per M feet. From Big Black River to Dowd's Landing, red cypress (the most durable timber known) will be used; its cost will be very moderate, somewhat higher than pine, from increase in cost in getting it out of swamps instead of from hard land, say $15 to $18 per M feet.

The general plan used will be pile trestle-bents supporting heavy track-

stringers or rail-plates; the bents formed of 3 to 5 piles firmly driven, and cut off and capped at a height to receive the grade-stringers. Upon the larger streams double pile-bents will be used, carrying truss-bridges of 50 to 100 feet spans. The cost of pile-trestle bridging, as lately built on the New-Orleans and Mobile Railroad on the plan as above, was $5 to $7 per linear foot of bridge and bents, and of truss-bridges of 55 feet span, $10 to $12 per linear foot of bridge and bents.

Approximate amount of these items, made up from best information now at hand, is as follows:

	Linear Foot Trestle.	Linear Foot Truss, 50 Feet Span.	Linear Foot Truss, 100 Feet Span.
Mobile to Enon.....	19,730	150	800
Enon to Jackson.....	8,200	320	...
Jackson to Yazoo City...	4,500	...	300
Yazoo City to Dowd's Landing.	24,000	1600	200
Aggregates.....	56,430	2070	1300

The foregoing quantities are made up from certain adopted grades and plans of structures. The first outlay for construction can be materially diminished upon the first 50 miles, (the portion containing about one fourth of all the work upon about one seventh of the whole distance,) by adopting grades 5 to 10 feet more per mile and building a coarser or less finished class of bridging, etc., and yet have, when completed, a road of better grades and alignment, and better fitted for economic traffic, than the great majority of roads now in operation in the country.

TRAFFIC.

With the extension line to Memphis completed, our road is at once connected with the various lines of commerce centring at that city, as well as the much larger commercial centre reached by the completion of the Iron Mountain Railroad from Helena to St. Louis. These avenues must, of necessity, (directness and economy of transit considered,) furnish the supplies and wants of Central Mississippi, and give egress for her productions. This traffic will consist of items as follows:

LOCAL BUSINESS.

Local traffic from the line of road will consist mainly of lumber going westward to supply the States west of the Mississippi, and southward to the sea for exportation, and cotton going to Mobile for shipment abroad.

The lumber region south or east of Jackson, as before stated, will furnish unlimited amounts at low cost. Lumber-men in this same region, but south, are now cutting lumber to special bills, and delivering it loaded on the cars of the New-Orleans and Mobile Railroad, at $12 per M feet. From this region to Helena will average say, 300 miles; the lumber weighs on an average 1½ tons per M feet; 4 cents per M feet per mile affords a fair profit for this kind of business in quantity. The cost of transportation would be $12, and cost of promiscuous lumber, including loading on cars, $11 per M feet. To-

tal delivered at Helena $23 per M. The market price now is $30. From this point ample facilities are furnished by the steamers and barges for distribution on the Mississippi, Missouri, and Ohio Rivers. Upon the completion of the St. Louis and Helena Railroad, and the Helena and Kansas City Railroad, now under vigorous prosecution, the lumber may be forwarded in same cars to St. Louis, 300 miles, at total cost there of $35 per M, (it is now worth $45 per M,) and to Kansas City, 340 miles, of $36.60. The demand at these last-named points for lumber of all kinds is unlimited; toward Mobile, the demand, now limited, will gradually increase to a large traffic. Pearl River, Pascagoula River, and Pensacola ship large quantities annually to Texas, the gulf ports and islands, and to France. There never has been heretofore adequate supply at Mobile for local consumption. The construction of this road will furnish this supply; the lumber can be delivered at Mobile from this region at $14 per M. It is now worth $16 to $26 per M.

The cotton region naturally tributary to this road is as yet hardly begun to be developed. In the Big Black valley, and eastward to Jackson, the country is well cultivated, and now grows a large amount of cotton. The total present production that would seek our road is between 300,000 and 350,000 bales. The opening up of the rich Yazoo basin lands, by the construction of this railroad, will increase this production to an extent hard to be realized now. The pine region, as the lumber is removed, will be cleared up, and grow good crops of cotton, sweet potatoes, and the finest fruits, especially grapes and peaches.

Local traffic on the line of road will be, from the westward, flour, pork, bacon, hay, oats, corn, and horses and mules. All of these are supplied from the North-western States, principally through St. Louis, and some from Cincinnati; also hardware, agricultural tools and implements; machinery, and general mercantile dry goods and groceries, are supplied from the same points. I have no statistics of the amounts of these items of traffic; they are only limited by the number of population and ability to purchase. The cost to consumers is now comparatively enormous; 50 to 150 per cent being added, after leaving Mississippi River, for distribution into the interior.

Local traffic on the line from the eastward, or Mobile, will be salt and West-India products—coffee, spices, sugar, tropical fruits, nuts, etc. etc.

THROUGH BUSINESS

Mobile harbor is entered with a depth of 23 feet of water on outer bar. The anchorage ground is of the best quality for holding; ample in area of surface, and with a depth of 24 to 30 feet of water. It is well sheltered, safe and secure for vessels in storms, and easy of access, and believed to be the best harbor on the Gulf of Mexico. The improvements of dredging a broad channel from the harbor up to the docks of the city, so as to allow vessels drawing 15 feet of water to discharge cargoes in Mobile, without the intervention of lighterage, now progressing under the auspices of the city of Mobile, the State of Alabama, and the general government, will, when completed, (and there seems no reasonable doubt of its early completion,) make the port of Mobile the cheapest and most desirable shipping point on the Gulf. It will invite, create, and enlarge commercial interchanges to the extent and capacity of the avenues of communication opening landward, of

which the Mobile and North-western Railroad will be one of the most important, tapping, as it were, the business of the great North-west, through a more direct, shorter, and cheaper line than any now constructed or devised, connected at Helena with a north line to St. Louis, and another north-west line to Kansas City, and another west line to Little Rock, and thence up the Arkansas River, all of which are in process of construction, and will be completed by the time our line reaches to Helena, all converging and centring at Helena to pour their traffic on to our road. Our line from Helena to Jackson forms a link in the most direct air-line route from St. Louis to New-Orleans. This North-west country wants salt, sugar, spices, foreign goods of all kinds, and productions of the States bordering on the southern shore of the Gulf of Mexico, and in return has iron, cotton, and the cereals for shipment, and will naturally seek the nearest and cheapest market ; and Mobile can furnish this with her improved harbor facilities, and the exercise of a wise forecast in providing increased means and appliances to insure economy of traffic and proper development of their great interests.

Respectfully submitted.

HENRY VAN VLECK, *Chief Engineer.*

APPENDIX.

APPENDIX A.—FRANCHISES.

CHARTER.

AN ACT TO INCORPORATE THE MOBILE AND NORTH-WESTERN RAILROAD COMPANY.

Names of incorporators.

SECTION 1. *Be it enacted by the Legislature of the State of Mississippi*, That Marshall O. Roberts, John H. Garner, Thomas Henry, Isaac Goldsmith, Gustavus Horton, L. Scranton, W. H. Ross, Lewis Troost, W. D. Mann, L. Brewer, C. H. Delamater, A. M. West, Robert Lowry, W. H. Gardner, B. Moog, James Gillette, C. F. Moulton, George B. Preston, Thomas W. Sims, A. J. Moses, Charles Forsyth, Frederick G. Bromberg, George Vidmer, J. A. Yordy, J. P. Southworth, M. B. Jonas, G. H. Wilcox, W. W. Cantine, B. Y. Pippey, C. W. Pierce, A. E. Buck, J. L. Worth, John R. Waller, S. A. H. Marks, H. D. Cooke, George H. Reynolds, James Gardner, A. L. Rowe, Isaac H. Bailey, Isaac K. Roberts, W. Schaffer, B. R. Pierce, E. D. Richardson, F. P. Hilliard, J. J. Hooker, M. S. Alcorn, J. A. P. Campbell, William H. Bolton, J. C. Clark, John Jones, M. A. Banks, G. A. Ketchum, Alphonse Hurtel, Jesse Ellis, J. P. Carter, E. M. Devall, Stephen Johnson, William R. Whittaker, and their associates, be, and they are hereby incorporated into and constituted a body politic and corporate, under the name and style of "Mobile and North-western Railroad Company," and by that name are hereby authorized to have and hold real and personal property for the objects, purposes, and business of said corporation within this State, or within any other State sovereignty or government that may authorize, sanction, and permit the same; to make contracts; to sue and be sued, plead and be impleaded; to make and break a common seal; to make rules, regulations, by-laws, and ordinances for the management, direction, and control of said corporation, not inconsistent with nor contrary to the laws of the State of Mississippi, and to the conditions and provisions stated and set forth in this act; and to have, enjoy, and exercise all the rights, powers, and privileges pertaining to corporate bodies and necessary for the objects and purposes of this act, with the privilege and authority to exercise such corporate powers within the said State of Mississippi; and also within any other State of the United States that shall recognize the existence of said corporation, and sanction, authorize, and permit the exercise of said corporate powers by said corporation within its limits.

Name of company. Authority given to company, and responsibilities imposed.

General purposes of the corporation.

SEC. 2. *Be it further enacted*, That the general purposes and objects of this corporation, the pursuit and furtherance of which is hereby granted, are hereby defined to be as follows: To construct, and build, and thereafter to own, maintain, manage, and use, a main trunk railroad upon such a route, and such a course, and with such track or tracks thereupon, as may be deemed by a majority of the Board of Directors of said corporation most

proper and expedient and best adapted to and for the public accommodation, from some suitable point on the eastern line of the State, near its south-east corner, where a railroad from Mobile on the best route would intersect it; thence extending in a north-west direction through the State of Mississippi to the Mississippi River, in the direction of a point at or near Helena, Arkansas, or such other point on the Mississippi River as may be deemed most eligible. And also to take, transport, carry, and convey persons, and property upon said railroad, by power or steam, or by any other power, and to receive for such transportation, carriage, and conveyance such tolls and charges as shall be from time to time established, fixed, and regulated by the directors of said corporation.

Line of road.

SEC. 3. *Be it further enacted*, That the said corporation is hereby authorized to take and receive by grant, bequest, or other gift, and to own and possess any real and personal estate that may be granted, devised, or given to it, by or from any person or persons, corporation or association, and to obtain by purchase, and to own and possess any real and personal estate that may be necessary and convenient for the construction, maintenance, and management of said railroad and branches, whether such real and personal estate may be situate or may be granted, devised, given, or obtained by purchase, within the limits of the State of Mississippi or elsewhere; and for the purposes of constructing said railroad and branches within the State of Mississippi, the said corporation are hereby authorized to lay out their said railroads and branches, or either of them, not exceeding two hundred feet wide, and to construct the same through and upon any lands of the State of Mississippi; and also to take and hold for the same, and for the purpose of necessary depots, stations, cuttings, turn-outs, and for obtaining stone and gravel, timber and other material, for the construction of said railroad and branches, any lands belonging to the State of Mississippi, and lying along or adjacent to the routes of said railroad and branches, that may be necessary for the construction, maintenance, and security of said railroad and branches; and said corporation is also hereby authorized to lay out their said railroad and branches, or either of them, within the State of Mississippi, not exceeding two hundred feet wide, upon any lands within said State, and to take and possess the same, and for the purposes of necessary turn-outs, depots, cuttings, and embankments, and for obtaining stone, gravel, timber, and other materials for the construction and maintenance of said railroad, to take and possess as much more land as may be necessary for the construction, maintenance, and security of said railroads: *Provided*, that all damages that may be occasioned or that may arise to any person or persons, corporations or associations, other than the State of Mississippi, by the taking of such lands and material for the possession and use of said corporation as aforesaid, shall be paid for in the manner provided in this act.

Authority of company to receive, hold and dispose of real and personal estate.

Property to be paid for.

SEC. 4. *Be it further enacted*, That the corporate powers of said corporation shall be exercised, and the business and business affairs shall be conducted and managed by thirteen directors. The thirteen persons herein first named as corporators shall be directors for the first year, and until others are appointed or elected to fill their place. After the expiration of the first year, the directors shall be elected annually by the stockholders of said corporation, at such time and place as may be hereafter named and designated in the by-laws of said corporation. All directors shall be stockholders, and all elections for

How the business shall be managed.

Directors to be stockholders.

directors shall be by ballot, and every stockholder shall be entitled to one vote, in person or by proxy, for each share of stock held or owned by him.

At first meeting directors to elect officers.

SEC. 5. *Be it further enacted*, That the directors of said corporation, at their first meeting, which shall be within six months after the passage of this act, shall elect one of their number president, and also one of their number vice-president; and shall elect a secretary and treasurer of said corporation; and they shall, from time to time, adopt by-laws, rules, and regulations for the observance and government of said corporation, its officers and members, in the management of the business and business affairs of said corporation, and which shall provide for the election and appointment of such other officers and agents of said corporation as shall be deemed necessary; and shall name the time and place for the future annual meetings and elections of the stockholders of said corporation; the said directors, at a meeting deemed by them proper, shall determine the amount of capital stock of said corporation, and the limits thereof, and the number of shares, and the par value of each share, and shall provide for receiving subscriptions to the capital stock, and opening books for the purpose; and the amount of the capital stock of said corporation and the limits thereof, and the number and par value of its shares, shall not thereafter be changed, except by the vote of the majority of the stockholders in interest of said corporation, at a special meeting called for that purpose by the president and secretary, by any five of the directors, or by a number of stockholders owning or representing one fourth of the shares of said capital stock. Five of said directors shall constitute a quorum for the transaction of business; and the number of the said directors may be increased or diminished by a majority vote of the stockholders in interest, at any future annual meeting: *Provided*, The number shall not be less than five and not more than seventeen. In case the number of directors is reduced to less than seven, a majority of them shall constitute a quorum. Vacancies in the Board of Directors shall be filled by a vote of two thirds of the directors remaining; such appointees are to continue until the next regular annual election of directors; in case it shall so happen that an election of directors shall not be made on the day appointed by the by-laws of said corporation, said company for that cause shall not be deemed dissolved; but such election may be holden on any subsequent day, which the then existing directors may appoint; the directors are to continue in office until their successors are elected and qualified; the secretary of said corporation shall enter upon the book of records of said corporation the proceedings of the first meeting of said directors, as also those of any adjourned meeting thereof; and the president shall, within thirty days thereafter, file a true copy thereof, certified by himself and the said secretary, under the seal of said corporation, in the office of the secretary of state, who is hereby authorized to receive and file the same among the records of his office, and which certified copy, as well as the original, shall be deemed and taken as conclusive evidence of the facts therein stated.

Power to adopt by-laws, etc., for their government.

Directors to determine the amount of capital stock.

Number to constitute a quorum.

Number of directors.

How vacancies in the Board of Directors shall be filled.

No forfeiture for failure to hold election at time appointed.

Duties of secretary.

Duties of president.

Power and authority of company to do certain things

SEC. 6. *Be it further enacted*, That the said company, their officers, servants, and agents, shall have full power and authority to enter upon all lands and tenements through which they may deem it necessary to make said road, and to survey, lay out, and construct the same, and to agree and contract for the land or right of way, with the owners of the land through which they may intend to make the said railroad; and in case said land

belongs to the estate of any deceased person, then with the executor or administrator of such; or in case the same belongs to a minor, then with his or her guardian; or in case said lands be held by trustees of school sections, or other trustees of the estate, then with such trustees; and the said executors, guardians, administrators, and trustees are hereby declared competent for such estates or minors, to contract with the said company for the right to use, possess, and occupy the lands of such estates, minors, or trustees, so far as may be necessary or useful to the purposes of said railroad; and the act and deed of such executors, administrators, guardians, or trustees, in relation thereto, shall pass the title in and to said land, in the same manner as if the said deed or act was done by legal owner of full age; and such executor, administrator, guardian, or trustee shall account to those interested upon their respective bonds for the amount paid him in pursuance of such agreement and compensation; and if the said company and parties representing lands prefer, they may refer the question of compensation to arbitrators mutually chosen, whose award or that of their umpire, in case of disagreement, shall vest title according to its terms.

How certain lands may be obtained.

Power to refer matters to arbitrators.

SEC. 7. *Be it further enacted*, That if said company can not agree with the owner of the land through which they desire said road to pass, or with the executor, administrator, guardian, or trustees aforesaid, it shall and may be lawful for the clerk of the circuit court of the county in which such lands lie, on the application of said company, or its agents, and he is required to issue a writ of *ad quod damnum*, commanding the sheriff that without delay he cause a jury of seven good and lawful men to be upon such land, on a day to be by the said sheriff fixed and appointed, and whereof it shall be his duty to give notice to the owner, executor, administrator, guardian, or trustee, at least five days before such day, if they be within his county, or if not, or if the owner or owners be unknown, then notice shall be given by advertisement, to be by said sheriff posted and fixed at the dwelling-house, if such there be, or on a public and conspicuous part of said land, at least five days before such appointed day, and then and there cause such jury, after being duly sworn by said sheriff or some justice of the peace, to make true inquest of the damage suffered by such owner or estate, by reason of making said road through the land; if any such jurors fail to appear, or, by reason of challenge for cause or otherwise, fail to sit on said inquest, the sheriff shall fill the said jury from the bystanders; and if they fail to render a verdict, the sheriff shall again, on the same or a subsequent day, impanel a new jury or jurors, until a verdict be had; which verdict and inquest, regularly certified by said sheriff, shall be returned into the office of the clerk of the circuit court of the county in which said lands lie, and there remain among the records; and the said inquest shall vest in said company the right to occupy and use such land for the purposes of said railroad, on the payment or tender of payment, of the damages therein assessed against said company; and in case of persons absent or unknown as aforesaid, the placing of the amount of said damages to the credit of the owner in the hands of the clerk of the circuit court of the county where such lands may lie, shall be deemed and taken as payment; and such clerk shall be liable on their bonds to make due payment of the said money so deposited on demand thereof.

How company may obtain lands, etc., where they can not agree with owners, guardians, etc.

Sheriff to perform certain duties.

Jurors sworn by sheriff or a justice of the peace.

Sheriff to return verdict to clerk of the circuit court.

SEC. 8. *Be it further enacted*, That it shall be the duty of the sheriff to appoint and hold said inquest within ten days after the receipt of said writ, *ad quod damnum*, and five days in ad-

Duty of sheriff to hold inquest.

Penalty for sheriff neglecting to perform duty.

Penalty for jurors neglecting to attend.

Fees allowed.

dition are allowed him for every additional jury which he may have under said writ; and for every default therein, the said sheriff shall be fined by the circuit court, at the instance of either party, not less than twenty nor more than one hundred dollars; and every juror summoned shall be fined not less than ten dollars for non-attendance; of all such fines or costs, the circuit court of the county shall have jurisdiction. There shall be allowed the following fees: To the clerks of the circuit court, for every writ of *ad quod damnum*, seventy-five cents; for receiving and filing inquests, seventy-five cents; to the sheriff, for giving notice, twenty-five cents; for holding inquest, five dollars; and for summoning witnesses, seventy-five cents each; jurors, each, two dollars per diem; which fees are not allowed till the verdict be returned and filed, and shall be taxed in the bill of costs, and paid by the said company: *Provided, however*, That before the application of said writ, the said company may tender to the owner or owners of any such lands a sum of money by them deemed equivalent to the damage to be sustained, and upon the refusal to accept the sum tendered, and a verdict for the same amount, or a less sum, the cost shall be taxed to, and paid by, the said owner or owners of the land upon which inquest is held.

Duty of company before making application for writ.

Additional rights conferred on company.

To make compensation.

SEC. 9. *Be it further enacted*, That the said company, for the purpose of making said railroad, or repairing or changing it afterward, shall have the same right of entry on adjacent land, and to cut, quarry, dig, take, and carry away any stone, wood, gravel, earth, or other materials which may be necessary, as is before provided, as to the right of way: *Provided, however*, That in all cases the said company shall make compensation to the owners, etc., as agreed on in manner thereinbefore provided.

To contract for lands to build depots, etc.

SEC. 10. *Be it further enacted*, That the said company may agree and contract for lands necessary for depots or other purposes, or condemn the same in like manner, and by like proceedings as hereinbefore provided for the lands on the route of the road.

Right of way over State lands, etc.

SEC. 11. *Be it further enacted*, That the said company shall have the right of way over, and the right to use materials on, any part of the land belonging to the State, over which the line of railroad of said company may pass.

Authority to cross, intersect, and join other railroads.

SEC. 12. *Be it further enacted*, That said company is hereby authorized to cross, intersect, join, and unite its railroad and branches with any other railroad heretofore or hereafter constructed in the State of Mississippi, at any points on their routes, and upon the ground of such other railroad company, with the necessary turn-outs, sidings, switches, and other conveniences in furtherance of the objects of its connections; and every railroad company in the State of Mississippi, whose railroad shall be intersected hereafter, by the railroad and branches of this company, shall unite with it in forming such intersections and connections, and grant the facilities aforesaid; and if the said railroad company, and those heretofore or hereafter constructed in the State of Mississippi, can not agree upon the points and manner of such crossings, intersections, and connections, and the divisions and apportionment of the cost and expense of the same, between said companies, and the division and apportionment between said companies of the tolls received for transportation, the same shall be ascertained and determined by commissioners, to be appointed by the circuit court of any county where said intersecting railroad is situated.

How disagreement may be settled.

Sec. 13. *Be it further enacted*, That whenever it shall be necessary for the construction of the railroad and branches of said

corporation to intersect or cross any stream or water-course, or any road or highway, it shall be lawful for said corporation to construct across or upon the same; but the said corporation shall reëstablish said stream or water-course, road or highway thus intersected, in such manner as not to prevent the passage thereon; and in all cases where any public highway or road is located in such manner that the railroad can not be judiciously laid out and constructed across or upon the same, without interfering therewith, in such case or cases said corporation may, by their engineers, cause such road or roads to be changed or altered in such manner that said railroad may be made on the best site of ground for that purpose: *Provided*, Said corporation shall put such road in as good repair as at the time of changing or altering the same.

Authority to cross any stream of water. Duty of company.

SEC. 14. *Be it further enacted*, That the railroad and branches of said corporation may cross the navigable waters of the Gulf of Mexico and the Mississippi River, at one or more points, with bridges or any other description of work: *Provided*, That such bridges or other work must be so constructed as to allow the navigation of said waters.

May cross Gulf of Mexico, and the Mississippi River.

SEC. 15. *Be it further enacted*, That said company is empowered and authorized to purchase or lease, from any railroad company or corporation, its railroad and the charter, franchises, property, and appurtenances thereof, and maintain and use the same as a part of the property of said company; and the said company is also authorized and empowered to enter into mutual contract with any other railroad company or corporation, by which the capital stock and property of such other company or corporations shall become merged and consolidated with said company, and into one joint and common stock, and be and exist as one company, possessing and enjoying all the powers and franchises, rights and privileges granted to, or vested in, each and all the companies so consolidated and united, by this State or other States through which the railroad and branches of said company, so consolidated and united, may pass; the provisions of any statute heretofore passed by this State to the contrary not withstanding.

Authority to purchase other railroads and franchises, etc.

SEC. 16. *Be it further enacted*, That this company is authorized and empowered, from time to time, to borrow money, or to purchase property upon its own credit, for the purpose of constructing and maintaining said railroad and branches, or establishing continuous and connecting lines of railroads, as heretofore provided in its act of incorporation; and as evidence of indebtedness of said company for such loans or the purchase of such property, may issue its corporate bonds, or promissory notes, bearing interest at such rate per annum as may be deemed expedient by the Board of Directors; and to secure the payment of said bonds and notes, may mortgage its railroad and branches, its capital stock, its corporate franchise, and any of its real or personal property, or any part or portion of the same; and it may, by its president, or other officers and agents duly authorized by its directors, sell, dispose of, or negotiate its capital stock, such capital stock being declared to be personal property, and transferable as such, or any of its personal property, at such time and place, and at such rates and for such prices, either for cash, property, or services rendered to the company, either within or without the limits of the State, as in the judgment of said company or its directors will best advance its interests; and if such bonds, notes, or stocks are thus sold at a discount, such sale shall be, in all respects, valid and binding upon this company; and such stock, bonds, or notes shall be as

Authority to borrow money, etc.

May issue bonds.

May mortgage its property for the redemption of its bonds.

May give authority to its president or other officers to sell its capital stock, etc.

If bonds, etc., are sold at a discount, sale to be valid.

valid for the par value thereof as if the same had been sold at par value.

Authority given company to obtain certain rights and privileges.

SEC. 17. *Be it further enacted*, That the said company is hereby authorized and empowered to obtain, by grant or otherwise, from any incorporated city or village within this State, that may be situated upon its railroad and branches, any rights, privileges, or franchises that any of said incorporated cities or villages may choose to grant in reference to the construction, and maintenance, and management of the railroad of said company, its depots, cars, locomotives, and its business within the limits of such or any of said incorporated cities and villages; and any such incorporated city or village, as hereinbefore named, is hereby authorized and empowered to grant to said company any such rights, privileges, and franchises as it may deem proper and advisable; and such rights, and privileges, and franchises, when granted to and accepted by said company, from any such incorporated city or village, shall be deemed and taken as rights, privileges, and franchises vested and confirmed in said company, and not liable to be thereafter revoked, changed, injured, or impaired, except with the consent of said company.

Authority of cities and villages to confer certain privileges. Privileges once conferred not to be revoked, except by consent of company.

May receive conditional donations of land.

How such donations shall be made.

SEC. 18. *Be it further enacted*, That said company may take and receive conditional donations of land for the purpose of constructing said road, from parties willing to make the same, upon such conditions as the parties may offer; which donations shall be made by deed conveying the lands to the Auditor of Public Accounts of the State of Mississippi, as a trustee, or to any other person that may be selected as a trustee, to be held by the party to whom said conveyance is made in trust, that upon the performance, by said company, of the conditions upon which such donation is made, said trustee will convey said lands to said company, so as to vest an absolute and indefeasible title to said lands in said company. But if said company shall not comply with the conditions upon which said donation is made within five years from the conveyance of the same, by the donor to said trustee, then the right of said company shall be defeated and forfeited, and it shall be the duty of the said trustee to reconvey said lands to the donor, or to his heirs or assigns.

Time given for compliance with conditions.

In what courts suits may be brought.

Who process may be served upon.

SEC. 19. *Be it further enacted*, That said company can sue and be sued, in this State, only in such courts of this State as are courts of record, and in such manner and form only as corporations in this State can be sued; and service of process in any action against the said company can be made only by service of the same upon either the president, secretary, treasurer, or any of the directors of said company, or upon an agent of the company, resident of this State, and designated by the company to receive such service; and it shall be the duty of said company to designate one of its agents, residing in this State, as the agent upon whom such service of process can be made, and to give public notice, by advertisement for four consecutive weeks, in some newspaper published at some place on the line of the said railroad and branches, in this State, of appointment of such agent; due notice shall be given whenever any change shall be made in such agency.

Company to designate one of its agents whom process may be served upon.

How subscription may be applied for.

How the question of subscription may be submitted.

SEC. 20. *Be it further enacted*, That upon application, by the president or other authorized agent of said corporation, to the constituted authorities of any county, city, or incorporated town in the State of Mississippi, on or adjacent to the main line and branch railroad of this corporation, for a subscription to a specified amount of the capital stock of said corporation, said constituted authorities are hereby required, without delay, to submit the question of "subscription" or "no subscription," to the

decision of the qualified voters of said county, city, or incorporated town at a special or regular election to be held therein; and if two thirds of said qualified voters be in favor of subscription, the constituted authorities of said counties, cities, or incorporated towns, are hereby required, without delay, and are authorized and empowered to subscribe to the capital stock of said corporation to the amount agreed upon; and bonds of the counties, cities, or incorporated towns making the subscriptions, having such times to run and such rates of interest as may be agreed upon, shall be issued without delay by the authorities of the counties, cities, and towns, to the president and directors of said corporation, to the amount of said subscription to the capital stock. An assessment shall be made upon the tax-payers of the counties, cities, and towns making the subscriptions, to pay the principal and interest of said bonds so issued; and certificates of shares in the capital stock of said company shall be given to all persons paying taxes, for the principal and interest of said bonds, to the amount paid by them, whenever the sum of taxes so paid shall be equal to one or more shares of said capital stock: *Provided*, That before the bonds of any county, city, or incorporated town, as above authorized, shall be issued and delivered to the said company, it shall be the duty of said company, through its president or agents, to give such security as shall be deemed sufficient by the constituted authorities of said county, city, or incorporated town, that the proceeds of the said bonds shall be faithfully applied to the construction and equipment of said railroad and branches.

How assessments may be made.

Company to give security before receiving bonds.

SEC. 21. *Be it further enacted*, That in consideration of the construction of the railroads provided for herein, and of the great benefit which the State will receive in the development of its agricultural resources by means of said railroads as works of internal improvement, and also of the increased value which will thereby be added to the property of the State, thus enabling the State to greatly increase its revenue without additional and burdensome taxation upon the people, the State hereby agrees with said company, (and which agreement is irrepealable,) that all taxes to which said company shall be subject for the period of thirty years are hereby appropriated and set apart, and shall be applied, to the payment of the debts and liabilities which the said company may have incurred in the construction of said road, or for money borrowed by said company upon lands or otherwise, to be used in constructing said road, or paying debts incurred by said company in constructing the same; and it shall be the duty of the tax-collector in every county in each and every year, to give to said company a receipt in full for the amount of said taxes upon receiving of said company an affidavit made by the president or cashier of said company, that the amount of said taxes have actually and in good faith been paid and applied by said company during the year, in payment of the debts incurred, or money borrowed as aforesaid, and which receipt so given shall be in full of all taxes, county, State, and municipal, to which said company shall be subject: *Provided, however*, That whenever the profits of said company shall enable it to declare and pay to the stockholders an annual dividend of eight per cent upon its capital stock, over and above the payment of its debts and liabilities, then the appropriation of the taxes aforesaid shall cease, and said taxes shall be paid by said company to the tax collector, to be by him paid over as required by law.

Exempt from tax for a limited time, for the construction of road.

Duty of tax collectors.

When tax shall be paid.

SEC. 22. *Be it further enacted*, That said company hereby incorporated shall commence building the main stem of said rail-

When the construction of the road shall commence.

road within three years of the passage of this act, otherwise this charter shall be forfeited.

How this act shall be construed.

SEC. 23. *Be it further enacted*, That this act shall be favorably and liberally construed, so as to favor all the purposes and the objects of the same, and the operation of the provisions thereof.

SEC. 24. *Be it further enacted*, That all acts, and parts of acts, in conflict with the provisions of this act, be and the same are hereby repealed, and this act take effect and be in force from and after its passage.

Approved July 20, 1870.

AN ACT FOR THE CONSOLIDATION OF THE MOBILE AND NORTH-WESTERN RAILROAD COMPANIES OF ALABAMA AND MISSISSIPPI, AND TO FACILITATE THE OBJECTS THEREOF.

Whereas, The State of Mississippi, by act of the Legislature thereof, approved July 20th, 1870, incorporated the Mobile and North-western Railroad Company; *And whereas*, a corporation exists in this State, under the general laws thereof, by the same name; *And whereas*, the object of said two corporations is to construct a railroad from the city of Mobile, in this State, to a point in the State of Mississippi opposite Helena, in Arkansas, and to other points on the Mississippi River; *And whereas*, it is desirable that the said two corporations should be consolidated and become one corporation for the object aforesaid; therefore—

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That the said Mobile and North-western Railroad Company, incorporated under the general law of Alabama, shall have power to agree with the said Mobile and North-western Railroad Company, incorporated by act of Legislature of Mississippi, for the consolidation of said two corporations, upon such terms and conditions as shall seem proper to said corporations, provided they do not conflict with the laws of Alabama, so that the same shall, from the date of said agreement, form but one corporation, which shall be known by the name of "Mobile and North-western Railroad Company."

SEC. 2. *Be it further enacted*, That this consolidated company shall be managed by a board of seven or more directors, five of whom shall constitute a quorum for the transaction of business; any law or parts of law to the contrary notwithstanding.

SEC. 3. *Be it further enacted*, That for the term of thirty years, in lieu of all taxes in the said State of Alabama, of whatever name or nature, including State, county, city, and municipal taxes, except the specific annual tax for the maintenance of public schools, a State tax of three per centum on all dividends declared and paid to the stockholders of said corporation, from time to time, shall be paid by said corporation to the State, through and in which the said railroad of said corporation shall be constructed and maintained, as provided in this act; and the amount of said taxes paid to each State shall be in the same proportion to the whole amount as the length of said railroad constructed and maintained in each State shall bear to the collective length of said railroad in both States; and the proportion of said taxes to be paid to this State shall be due and payable, and shall be paid to the treasurer of the State by said corporation, at the time any such dividends shall be so declared, and shall be due and payable by said corporation.

SEC. 4. *Be it further enacted*, That the consolidated Mobile and North-western Railroad Company aforesaid is hereby granted all the rights and privileges conferred upon railroad companies organized under the acts to provide for the creation and regulation of railroad companies in the State of Alabama, approved December 29th, 1868, and the acts amendatory and supplementary thereto.

SEC. 5. *Be it further enacted*, That all acts and parts of acts, inconsistent with the provisions of this act, be, and the same are, hereby repealed.

SEC. 6. *Be it further enacted*, That this act shall take effect immediately.

Approved February 20, 1871.

APPENDIX B.—GRANTS.

AN ACT TO AUTHORIZE THE MAYOR, ALDERMEN, AND COMMON COUNCIL OF THE CITY OF MOBILE TO ISSUE BONDS IN AID OF THE MOBILE AND NORTH-WESTERN RAILROAD COMPANY.

SECTION 1. *Be it enacted by the General Assembly of Alabama*, That the mayor, aldermen, and common council of the city of Mobile be and are hereby authorized, to issue their bonds to an extent not exceeding one million dollars, for the purpose of aiding the construction and equipment of a railroad to be constructed by the Mobile and North-western Railroad Company, a corporation created under the laws of said State; that said bonds shall be of such form and denomination, and shall mature at such period, not exceeding thirty years from the date thereof, and shall bear such rate of interest not exceeding eight per centum per annum, as the said mayor and aldermen and common council of the city of Mobile may deem proper; and that for the payment of the principal and interest on said bonds, the said mayor, aldermen, and common council of the city of Mobile may pledge the faith of said corporation and the taxes which by their charter they are authorized to raise.

SEC. 2. *Be it further enacted*, That the bonds authorized to be issued by the said mayor, aldermen, and common council of the city of Mobile by the first section of this act, may be applied by said corporation to the purchase of shares of the capital stock of the said Mobile and North-western Railroad Company, or the said corporation may lend said bonds to said railroad company, or may make any other contract with said railroad company, giving the use of said bonds to the same, for any purpose deemed proper by said corporation in furtherance of the construction of the railroad, equipment, and works of the said railroad company.

SEC. 3. *Be it further enacted*, That all acts, and parts of acts, in conflict with this act, are hereby repealed.

SEC. 4. *Be it further enacted*, That this act shall take effect immediately.

Approved March 8, 1871.

AN ORDINANCE OF MOBILE CITY GRANTING AID.

Whereas, A duly incorporated company, composed of many of the citizens and business men of the city of Mobile, has been organized under the laws of the State of Alabama and of the State of Mississippi, and which company is known as the Mobile and North-western Railroad Company, having for its object the construction, equipment, and operating of a line of railway from the city of Mobile, in a north-westerly direction, to a point on the Mississippi River opposite the city of Helena, Arkansas; and

Whereas, The said line of railway will pass through and open to trade with the city of Mobile a vast territory of rich country, which is now entirely tributary to other points, but which, if diverted to Mobile, would be of great annual value to the city, largely increasing its trade and commerce, and hence the value of property in the city; and

Whereas, The *bona-fide* subscriptions to the capital stock of the said railroad company now aggregate more than a half a million dollars, divided among some hundreds of the most solvent citizens of Mobile; and

Whereas, The Board of Trade of the city has unanimously memorialized, and several hundreds of the principal property-owners and tax-payers have petitioned the Mayor, Aldermen, and Common Council to extend aid to the said railroad company to the extent of one million dollars; and

Whereas, The Legislature of the State of Alabama, by act approved March 8th, 1871, has authorized the issue of the bonds of the city of Mobile in aid of the said railroad company to the extent of one million of dollars; now, therefore,

SECTION 1. *Be it ordained by the Mayor, Aldermen, and Common Council of the city of Mobile*, That for the purpose of aiding the said the Mobile and North-western Railroad Company in the construction and equipment of their proposed line of railway, the mayor of the city of Mobile is hereby authorized and directed to enter into a contract, in due form, with said railroad company, with stipulations as follows: That one thousand bonds of the city of Mobile, for one thousand dollars each, made payable to bearer, having thirty years to run, and bearing interest at the rate of eight per centum per annum, payable semi-annually, shall be lent and delivered to the said railroad company, to be used and the proceeds applied by said company to the construction and equipment of said railroad, its branches, depots, and appurtenances; provided, that in lieu of not more than five hundred of the bonds above designated, there may be issued, at the election of the said company, bonds to an equivalent amount, of denominations less than one thousand dollars, but not less than fifty dollars, and payable not less than ten nor more than thirty years from date thereof. That coupons for interest shall be attached to said bonds, which shall be payable semi-annually, at a designated agency in New-York, or London, England, at the election of the company, and at the Bank of Mobile. That said bonds shall be sealed with the seal of the city, signed by the mayor, and drawn in proper form, as the mayor shall be advised, and as such bonds are usually framed, and the issue thereof duly registered and recorded in the city records; and the coupons shall be signed by the treasurer of the city, but such signature may be a *fac-simile* engraving. That the said bonds, with coupons, shall be delivered to said company as hereinafter provided, as follows: Bonds to the amount of three hundred thousand dollars as soon as they can be prepared and executed. Bonds to the amount of two hundred thousand dollars more, whenever twenty miles of said projected railway shall be constructed and in condition to operate. Bonds to the amount of two hundred and fifty thousand dollars more, whenever fifty miles of said projected railway shall be constructed and ready to operate. Bonds to the amount of two hundred and fifty thousand dollars more, whenever one hundred miles of said projected railway shall be constructed and ready to operate. That payment of such coupons only shall be made, as mature after delivery of the bonds to which they belong, to the company, as hereinbefore provided for. That the city shall provide for and pay out of any funds in its treasury, such interest due by coupons, as shall be first payable, until it shall have paid a sum equal to three years' interest on said sum of one million of dollars; and if to provide funds for this purpose it shall be necessary to levy a special tax, such special tax shall be levied and the proceeds of collection under such levy shall be specially set apart and appropriated to the payment of the coupons of said bonds, and shall be used for no other purpose; and in such case, the tax-payer shall receive a separate receipt for the amount of such taxes, which the said company shall be bound to reimburse to him by the issue of stock to him when the same shall amount to the par value of one or more shares; after which, the railroad company shall pay at maturity all coupons for interest, which it may have received, out of its own funds. That the said railroad company shall pay all principal sums —which may become due and payable to extinguish the said bonds—out of their own moneys, and shall relieve the city from all payments on account of said bonds, over and above the amount of the three years' interest which the city agrees to provide for and pay out of its own moneys. That the railroad company shall create and provide a sinking fund for the payment of said bonds, and for the interest it stipulates to pay, in order to meet said payments, and that in the investment of such sinking funds preference shall be given to investments in said bonds herein provided to be issued, if it can be done on terms of equal advantage with other investments. That if by reason of any default by said railroad company to meet at maturity and pay the interest and principal sums undertaken to be met and paid by the company, the city should be required to make any such payment, which the company stipulates to pay, then the city shall pay the same from any funds in the treasury, and a special tax, if necessary, shall be levied to reimburse the same

to the treasury of the city; and in the event of such special tax being levied and collected, the tax-payer shall be entitled to a separate receipt for such tax, which the company shall be bound to reimburse to him by the issue of the preferred stock of the company to him, when such receipts are presented in sums of one hundred dollars.

SEC. 2. *And be it further ordained,* That to carry out such contract, when made, the mayor is authorized and directed to cause to be prepared and executed in the best style of engraven bond work, as early as practicable, at the expense of said company, bonds to the amount of one million of dollars, as hereinbefore provided, with coupons as provided, attached, which bonds shall be immediately signed by him and duly recorded, as hereinbefore provided, and 300 bonds of $1000 each, or a number of less denomination, equal in amount to $300,000, shall be delivered to the Mobile and North-western Railroad Company; and the remaining bonds, amounting in aggregate to $700,000, shall then be deposited in the vaults of the Bank of Mobile, or in the vaults of any other bank in the city of Mobile should the Bank of Mobile decline to receive them; and the said bonds shall be in the charge of the president of the bank in which they are so deposited, for safe keeping and compliance with the terms of the contract herein provided for; and the president of such bank for the time being is hereby constituted a trustee for both parties, to deliver said bonds and coupons according to the terms of said contract to said railroad company, from time to time, as they shall be entitled to receive them, and on their executing on each delivery a receipt for the same, with an obligation under the seal of the company to apply the said bonds and proceeds of the sale thereof to the construction and equipment of the aforesaid proposed line of railway, its branches or buildings, and to no other purpose.

SEC. 3. *And be it further ordained,* That the Mayor and the Presidents of the two Boards of the city of Mobile are hereby constituted a Board of Commissioners, whose duty it shall be to examine the said railway whenever the company shall apply for an installment of bonds, after the first installment, as hereinbefore provided, and shall make report to the trustee holding the said bonds, whether or not the terms of the contract between the city and the said railroad company have been so complied with as to entitle said company to the bonds demanded of them; upon which report being received by him, if it be favorable, the said trustee shall deliver said installment of bonds to the company. In case of any disagreement between the Company and said Board of Commissioners as to the construction of the road, the question shall be referred to two disinterested railroad engineers, whose decision shall be final. One of said engineers to be chosen by the company and the other by the commissioners.

SEC. 4. *And be it further ordained,* That said company shall establish its principal office and its terminal freight and passenger depots, machine and work-shops within the city limits, and shall, after three years from the issue by the city of the first installment of bonds, pay tax thereon, the same as individuals pay.

Approved June 17, 1871.

M. HORST, *Mayor.*

Attest: B. F. JACKSON, *City Clerk.*

AN ORDINANCE TO AMEND AN ORDINANCE TO AID THE CONSTRUCTION OF THE MOBILE AND NORTH-WESTERN RAILROAD, APPROVED JUNE 17, 1871.

Be it ordained by the Mayor, Aldermen, and Common Council of the city of Mobile, That the bonds of the city authorized to be issued to aid the construction of the Mobile and North-western Railroad, by ordinance approved, June 17th, 1871, may, at the option of the said railroad company, be drawn for an amount each, in sterling English money, equivalent to one thousand dollars United States coin, with the principal and interest payable in sterling money in London, England, or that they may be for the sum of one thousand dollars each of the coin of the United States, with interest payable in the

same at the city of New-York. And the mayor is hereby authorized and directed to issue bonds of such purport at request of said company.

Approved July 13, 1871.

M. HORST, *Mayor.*

Attest : B. F. JACKSON, *City Clerk.*

LAND GRANT.

AN ACT TO FACILITATE THE CONSTRUCTION OF THE MOBILE AND NORTH-WESTERN RAILROAD.

SECTION 1. *Be it enacted by the Legislature of the State of Mississippi,* That the Mobile and North-western Railroad Company, a corporation created heretofore by an act of the Legislature of Mississippi, and having for its object the construction, equipment, and operating of a line of railway from the city of Mobile, Alabama, to a point opposite the city of Helena, Arkansas, is hereby authorized and empowered, through its officers or agents, to select, locate, and enter any and all lands belonging to the State of Mississippi, lying within a distance of twenty miles from the line of said railway, proposed to be constructed by the said company; and may purchase, become the possessors of, and hold the fee-simple title to the same, upon the payment into the treasury of the State of the sum of two cents per acre for all lands thus selected and purchased; provided said lands shall not be reserved from other purchasers, and held, subject to the terms of this contract and enactment, for a longer period than three years from the date of the passage hereof: *Provided,* that nothing herein contained shall be construed to cover certain lands in Jones County, heretofore purchased from the State by *bona-fide* purchasers, and which purchases have been set aside by decree of the Chancery Court.

SEC. 2. *Be it further enacted,* That the governor of the State is hereby empowered and required to issue the patent of the State for the lands selected by said railroad company, in accordance with the terms of this act, upon the presentation to him of the receipt of the treasurer of the State, certifying that the sum of two cents per acre has been paid into the treasury for the lands for which patent is claimed: Provided, that the governor shall not be required to issue such patents until evidence is presented to him that not less than forty miles of the said railway line have been graded and made ready for the superstructure.

SEC. 3. *Be it further enacted,* That to further aid and encourage the construction of the said railway line, the said company is hereby authorized and empowered to purchase and hold any and all lands to which the State may become or is entitled under the act granting swamp and overflowed lands to this and other States by Congress, approved September 28th, 1850, and acts amendatory and supplemental to the same, and such lands as have not heretofore been patented to the State upon the conditions, namely: When eighty miles of the said railway line shall be constructed and made ready to operate, then the said company, upon payment into the treasury of the State of the sum of two cents per acre, shall be entitled to receive a patent for the one half of all lands described in this section, and upon the completion, ready for operation, of one hundred and sixty miles of said railway, then the said company, upon payment into the treasury of the State of the sum of two cents per acre for the remainder of all such lands, shall be entitled to a fee-simple patent for the same: *Provided,* that the first eighty miles of said railway line shall be constructed, as above provided, within the period of three years from the date of this act, at least thirty miles of which shall be constructed on the northern end of the same, beginning at a point opposite Helena, Arkansas, and one hundred and sixty miles of the same shall be constructed within five years from the date hereof.

SEC. 4. *Be it further enacted,* That the governor of the State is hereby required to immediately take the necessary steps to secure, at the earli-

est practicable time, patents from the general government for all lands to which the State may be entitled under the aforesaid act of Congress, and to issue patents for the same to the said railroad company, when evidence is presented to him that the terms and condition of this act and contract have been complied with on the part of said company; *Provided*, that sections 3 and 4 of this act shall not be so construed as to apply to any lands purchased in Jackson County by the citizens thereof: *Provided*, further, that this act shall not be so construed as to include any lands held by the State forfeited for non-payment of taxes.

SEC. 5. *Be it further enacted*, That all acts and parts of acts in conflict with the provisions of this act are hereby repealed.

Approved May 8, 1871.

SECRETARY OF STATE'S CERTIFICATE OF QUANTITY OF LANDS BELONGING TO THE COMPANY.

EXECUTIVE DEPARTMENT OF MISSISSIPPI,
OFFICE OF SECRETARY OF STATE,
JACKSON, MISS., August 26, 1871.

COL. W. D. MANN, *Vice-President Mobile and North-western Railroad Co.:*

SIR: I have the honor to state, that of the lands known as the swamp or overflowed lands, granted to the States by act of Congress of September 28th, 1850, which have been heretofore patented to the State of Mississippi, there remains unsold and subject to patent to your company, under the act of the Legislature approved May 8th, 1871, the aggregate amount of three hundred and fifty-seven thousand six hundred and twenty (357,620) acres. Further, that there have been lists certified as correct and subject to patent from the United States, furnished this office from the General Land-Office at Washington, D. C., amounting in the aggregate to three hundred and eighty-seven thousand two hundred and fifty-nine (387,259) acres, for which at this date no patent has been received here. No reason is known to exist why the United States should not issue patent for this further amount of land. Application has just been made by the executive for patents for these lands, as well as for some two hundred thousand (200,000) acres additional, which were duly selected, and lists furnished to the General Land-Office at Washington. All these lands patented, and those to be patented as herein stated, if so patented, will be subject to entry and purchase by your company, under the act of May 8th, 1871. There are also lands known as "Internal Improvement Fund Lands," approximating in amount to twenty-one thousand (21,000) acres, which are also subject to entry by your company under provisions of the said act.

Very respectfully, JAMES LYNCH, *Secretary of State.*

LETTER FROM COMMISSIONER OF GENERAL LAND-OFFICE.

The following letter to the Governor of Mississippi, in reply to his application for patents for lands due the State, referred to in the letter of the Secretary of State, shows the correctness of the secretary's views, and assures the early confirmation to the State of the lands in question:

DEPARTMENT OF THE INTERIOR,
GENERAL LAND-OFFICE,
WASHINGTON, D. C., Sept. 1, 1871.

HON. J. L. ALCORN, *Governor of Mississippi, Jackson, Miss.:*

SIR: In reply to your letter of 24th ult., I have to say that, as soon as practicable, an examination will be made in reference to lands reported to this office as swamp and overflowed lands in the State of Mississippi, and patents will be executed and forwarded (where the same has not already been done) for all tracts to which the State may appear to be entitled.

Very respectfully, your obedient servant,

WILLIS DRUMMOND, *Commissioner.*

OPINION OF HON. WILLIAM YERGER, COUNSEL FOR THE COMPANY, ON THE QUESTION OF TITLE TO "TAX"-LANDS.

JACKSON, August 31, 1871.

COL. W. D. MANN, *Vice-President of Mobile and North-western Railroad Co.:*

DEAR SIR: At your request, I have examined the act of the Mississippi Legislature, approved May 8th, 1871, entitled "An act to facilitate the construction of the Mobile and North-western Railroad."

By the first section, the Mobile and North-western Railroad Company is authorized and empowered to purchase from the State "any and all lands belonging to the State of Mississippi lying within a distance of twenty miles from the line of said railway proposed to be constructed by the company."

This purchase is to be made, and a title in fee-simple is to be acquired, by paying into the State treasury two cents per acre for the lands, and all the State lands within the district above mentioned are reserved from sale to other purchasers than the railroad company for the period of three years from the date of the passage of the act, the 8th of May, 1871. There is reserved from the operation of this act, by the provisions of the section aforesaid, "certain lands in Jones County, heretofore purchased from the State by *bona-fide* purchasers, and which purchases have been set aside by decree of the Chancery Court."

The second section of the act provides that the governor shall issue to the company a patent for the lands so purchased, "upon the presentation to him of the receipt of the treasurer of the State certifying that the sum of two cents per acre has been paid into the treasury for the lands for which patent is claimed." But this patent is not to issue until evidence is presented to the governor "that not less than forty miles of the said railway line have been graded and made ready for the superstructure."

The lands owned by the State were acquired by grant from the United States for the purpose of internal improvement, or by "purchase" at sales made for non-payment of taxes due to the State, and by "forfeiture" to the State, under the provisions of the act of 1850 for the non-payment of taxes; and the right of the railroad company to purchase extends, by the provisions of the first section, to all lands owned by the State, however title thereto was acquired by the State, within the prescribed district, except the lands in Jones County before referred to. But the fourth section of the act declares that "this act shall not be so construed as to include any lands held by the State forfeited for non-payment of taxes."

The question arises under this section, What lands were intended to be excluded from the operation of the act. Were they all lands acquired by the State through the operation of the tax laws, or only a particular class of such lands. It may be remarked that the State acquired title to most of the lands within the district mentioned in Section 1 through the operation of the tax laws, and if all lands so acquired were excluded, it would materially limit the right of purchase by the company, and deprive it of many of the benefits which the Legislature evidently intended to confer.

In order to understand what the Legislature did intend by the restriction in Section 4, it is necessary to recur to the past legislation of the State in reference to that legislation.

By some, and in fact by all, of the tax laws of the State, except the act of 1850, provision was made that, on the non-payment by the owner of the taxes assessed upon his property, it should be the duty of the sheriff, in the event he did not have sufficient personal property out of which the taxes could be collected by distress, to expose his lands for sale for the unpaid taxes; and at such sale, if no one else would bid the amount of taxes and costs, it was made the duty of the sheriff to strike off the same to the State as purchaser thereof, and to make a deed to the State for the same, whereby the title of the owner of the lands was vested in the State. In this way, the State acquired a large quantity of lands by "purchase" at sales made for non-payment of taxes.

But the act of 1850 provided that, upon the non-payment of taxes assessed

upon the property of a party, at a day fixed in the law, the lands of the party so failing to pay should be "forfeited" without being offered for sale, and that the sheriff should at once convey the same for the amount of taxes remaining due and unpaid to the State. Under this law, the State holds a large quantity of land "forfeited for non-payment of taxes." This act of the Legislature by which lands were "forfeited" for non-payment of taxes has been declared to be unconstitutional by the Supreme Court of the State; and the title to the lands acquired by the State under it is therefore not valid. Inasmuch then as the State holds lands acquired by "purchase" at tax sales, and lands which it acquired by "forfeiture" for non-payment of taxes, I think the proper construction of the proviso in the fourth section before referred to should restrict the right of the company to purchase those lands only which the State held by "forfeiture" for non-payment of taxes, and not to those which it held by purchase at tax sales. An obvious reason for a distinction in the two cases will be found in the decision of the Supreme Court before referred to. The State was not a party to that suit; but the validity of the law was passed upon by the court, and the Legislature would therefore be unwilling to convey lands where the State did not have a valid title, and which, when conveyed to a third party, might lead to embarrassing litigation prejudicial to the State. An additional reason for this construction will be found in the rule of law which, in doubtful cases, holds the language most strongly against the grantor.

I am not aware that there is any other portion of the act of May 8th, 1871, upon which you wish an expression of my opinion. I have not referred to the third section, by which the right to purchase certain other lands was conferred upon the railway company. That section is very definite, and not susceptible of two meanings, and confers upon the company the right to purchase all the lands mentioned in that section, upon the terms and conditions specified therein. Very respectfully, W. YERGER.

AUDITOR'S CERTIFICATE OF "TAX" LANDS.

OFFICE OF AUDITOR OF PUBLIC ACCOUNTS,
JACKSON, MISS., Sept. 1, 1871.

I hereby certify that, at the date of my special report of lands held by the State for taxes, made to the House of Representatives April 4th, 1871, the State of Mississippi held, by virtue of purchase on account of sales for taxes unpaid, the amounts of land in the several counties named below, each respectively, and aggregating one million forty-eight thousand four hundred and fifty acres.

	No. OF ACRES.
Tunica	77,244
Coahoma	81,458
Tallahatchie	163,350
Sunflower	329,193
Carroll	95,019
Holmes	95,964
Yazoo	70,252
Madison	21,083
Hinds	40,428
Rankin	17,463
Simpson	3,103
Smith	9,940
Covington	8,437
Jones	None held by the State.
Perry	840
Greene	None held by the State.
Jackson	34,676
Aggregate	1,048,450

STATE OF MISSISSIPPI, *Sct.*

I, Henry Musgrove, Auditor of Public Accounts of the State aforesaid, do hereby certify that the foregoing statement of lands held by the State at the date therein mentioned, is truly and correctly copied from the original on file in my office.

Given under my hand and official seal, at Jackson, this 1st day of September, 1871.

H. MUSGROVE, *Auditor of Public Accounts.*

A JOINT RESOLUTION, MEMORIALIZING CONGRESS ON THE SUBJECT OF AID, BY GRANT OF LANDS, TO THE MOBILE AND NORTH-WESTERN RAILROAD COMPANY.

Whereas, A company, composed of a large number of the first citizens of this State and of the adjoining State of Alabama, has been incorporated under the laws of this State and of the State of Alabama, and which company has for its object the construction of a line of railway from the city of Mobile, near the south-east corner of the State, to the city of Helena, Ark., near the north-west corner of the State; thus diagonally bisecting the entire State, and opening to access, and to facilities of market, a vast portion of the very richest part of the State, now almost without means of outlet for products or inlet for supplies; and

Whereas, The said company is now making vigorous efforts to prosecute to early completion their contemplated line of railway, and to that end have secured *bona-fide* subscriptions to the capital stock of the company to the extent of more than a half-million dollars from individual citizens of the city of Mobile; and

Whereas, A large portion of the contemplated line of railway will be very expensive in construction; and

Whereas, That division of the line lying between the city of Mobile and the Vicksburg and Meridian Railroad will form an important link in the great South-Pacific route, enabling the traffic of that route to reach tide-water to the East at shorter distance and more advantageously than it can by any other line, thus making this railway of national importance as a legitimate part of the newly-inaugurated trans-continental route; and

Whereas, This division of the line extends through immense tracts of lands belonging to the general government, which lands are now of little or no value, and must remain so until a railway is constructed opening that section to settlement and a market; and

Whereas, It was the former pleasure of Congress to grant lands in aid of a line of railway nearly parallel with the projected route of the Mobile and North-western Railroad, and designed to develop, though to a lesser degree, the same territory, of which grant the company were unable to avail themselves, and the lands have reverted to the general government; now, therefore,

SECTION 1. *Be it resolved by the Legislature of the State of Mississippi,* That we respectfully memorialize the Congress of the United States to grant a liberal donation of the public lands, say to the extent of the alternate sections lying on either side of the railway line, to the distance of 15 miles, upon such terms and conditions as by them shall be deemed proper to aid in the construction and equipment of the proposed Mobile and North-western Railroad.

SEC. 2. *Be it further resolved,* That our senators in Congress be instructed, and our representatives requested, to use their best efforts to secure such grant of lands in aid of the said railroad.

SEC. 3. *Be it further resolved,* That the governor shall transmit a copy of this preamble and thes resolutions to the President of the United States, to

the President of the Senate, and the Speaker of the House of Representatives in Congress, and to each senator and member from this State.

Approved April 6, 1871.

PREAMBLE AND RESOLUTIONS ADOPTED BY THE MOBILE BOARD OF TRADE APRIL 4, 1871.

Whereas, The Legislature of Mississippi has passed, and the governor has approved, a memorial to Congress urging an appropriation of public lands in aid of the Mobile and North-western Railroad; and

Whereas, We, as a body, feel the intense importance to the future of this city of the early completion of this railroad; and

Whereas, It is confidently believed that the city of Mobile, as a corporation, will grant aid to the railroad to the extent of one million dollars; now, therefore,

1. *Be it resolved*, That we earnestly indorse the memorial of the Legislature of Mississippi, and adopt it as a memorial from this body to the Congress of the United States.

2. *Resolved*, That this board respectfully but urgently request the senators and representatives in Congress from this State to use their best efforts to secure the grant of public land asked in the memorial; and thus second the vigorous efforts our people are making to build up this city, and to enhance the wealth and prosperity of this State by the construction of this great railroad.

3. *Resolved*, That copies of this preamble and these resolutions, and of the memorial referred to, be sent, properly certified by the President and Secretary of the Board of Trade, to the President of the Senate, the Speaker of the House of Representatives, and to each senator and member of Congress from this State.

PRICE WILLIAMS,
President Mobile Board of Trade.

Attest: C. FORSYTH, *Secretary.*

ACT OF THE LEGISLATURE OF MISSISSIPPI UNDER WHICH THE MOBILE AND NORTH-WESTERN RAILROAD COMPANY WILL RECEIVE $4000 CASH BONUS PER MILE FOR ENTIRE LENGTH OF ROAD, BRANCHES, AND SIDINGS.

AN ACT TO ENCOURAGE INTERNAL IMPROVEMENTS IN THE STATE OF MISSISSIPPI.

SECTION 1. *Be it enacted by the Legislature of the State of Mississippi*, That the State hereby grants and appropriates out of any money in the State treasury, not otherwise appropriated, to any railroad company that has been or may be chartered by the State of Mississippi, which company has not constructed any portion of its contemplated line of railroad at the passage of this act, but which shall hereafter construct in first-class manner, with iron rails of not less than fifty-six (56) pounds weight per yard, twenty-five miles of its projected line within the State, on or before the first day of September, 1872, and shall construct the remaining portion of said projected line, its sidings and branches, or any part thereof, on or before the first day of September, 1875, in the manner as hereinafter provided, the sum of four thousand dollars per mile for each and every mile of its projected line, sidings, and branches, constructed in the manner and within the time hereinbefore provided.

SEC. 2. *Be it further enacted*, That the governor of the State is hereby authorized and required to appoint three commissioners, forming a State Board of Railway Commissioners, who shall serve until their successors are appointed, and whose duty it shall be, under the direction of the governor, to examine into and report upon the character and condition of all railroads availing themselves of the privileges and benefits of this act. Said commissioners shall receive a compensation of eight dollars a day each while actually employed in the performance of their duties, and twenty cents per mile for the distance traveled in performing said duty, which compensation shall

be paid by the railroad company in behalf of which the services are rendered; and before entering upon the duties of their office, they shall take an oath, before an officer authorized to administer the same, that they will faithfully discharge the duties and trust committed to them.

SEC. 3. *Be it further enacted,* That whenever any railroad company shall notify the governor of the State that they have constructed twenty-five or more miles of their line, ready for operating, in compliance with the provisions of this act, the governor shall forthwith direct said railroad commissioners to examine said line of constructed railroad, and take such evidence as they may deem necessary, in respect to distance and time of completion, and report to him without delay the facts and conditions thereof. And if said board, or a majority of them, shall report to the governor that the said railroad company has constructed a certain portion of their road under and in full compliance with the terms and conditions contained in the preceding sections of this act, then in such cases the governor shall notify the auditor of the State to that effect, and thereupon the said auditor is hereby empowered and required to issue to the said railroad company his warrant upon the treasurer of the State for an amount equal to four thousand dollars per mile for the whole length of road constructed as reported by said commissioners.

SEC. 4. *Be it further enacted,* That whenever any railroad company, which shall have constructed twenty-five or more miles prior to the first day of September, 1872, and under and in compliance with the provisions of this act, shall from time to time, as the work progresses, notify the governor of the State that they have constructed any additional portion or portions of their road, sidings, or branches, in section or sections not less than ten miles in length, and prior to September 1st, 1875, in addition to the length of road constructed prior to September 1st, 1872, then, and in each case, the governor shall forthwith direct the said railroad commissioners to examine such portions or sections of road embraced in said notices, and report the condition of the same in the same manner and form as provided in section three of this act, in relation to the construction, examination, and approval of the first twenty-five or more miles; and in each and every case, when the said commissioners, or a majority of them, shall report to the governor that said portion or portions of road have been constructed in full compliance with the provisions of this act, the governor shall notify the auditor of this State to that effect, and thereupon said auditor is hereby empowered and required in each and every case to issue to the said railroad company his warrant upon the treasurer of this State for an amount equal to four thousand dollars per mile for the whole length of road constructed, as reported by said commissioners.

SEC. 5. *Be it further enacted,* That the treasurer of the State shall make payments of the warrants, drawn by the auditor in compliance with this act, out of any moneys in the treasury not otherwise especially appropriated, and a sufficient sum of money to meet the requirements of this act is hereby appropriated and set apart from the accruing revenues of the State.

SEC. 6. *Be it further enacted,* That all railroad companies availing themselves of the provisions and benefits of this act shall annually make payment into the State treasury of a specific tax, as follows: "For every passenger transported on this line a distance of fifty miles within the State of Mississippi, and not exceeding one hundred miles, the sum of five cents; for every passenger transported a distance of one hundred miles, and not exceeding one hundred and fifty miles, the sum of ten cents; for every passenger transported a distance of one hundred and fifty miles, and not exceeding two hundred and fifty miles, the sum of twenty-five cents; and for every passenger transported a distance exceeding two hundred and fifty miles, the sum of fifty cents, the full amount of all of which taxes shall be paid for the period of ten years from the date of the passage of this act, and shall be applied solely to the augmenting of the permanent school fund of the State."

SEC. 7. *Be it further enacted,* That this act shall take effect and be in force from and after its passage.

Approved May 13, 1871.

APPENDIX C.—MOBILE FINANCES.

REPORT OF A SPECIAL COMMITTEE OF THE ALDERMEN AND COMMON COUNCIL OF THE CITY OF MOBILE ON THE ORDINANCE GRANTING ONE MILLION OF DOLLARS STERLING, OR GOLD EIGHT PER CENT THIRTY-YEAR BONDS, OF THE CITY, IN AID OF THE MOBILE AND NORTH-WESTERN RAILROAD COMPANY.

To the Boards of Aldermen and Common Council:

The undersigned members of the joint committee on the proposed ordinance to aid in the construction of the Mobile and North-western Railroad submit the following as their report:

The projected railroad has been under discussion in this city for the past year. Several public meetings to consider it have been numerously attended by the capitalists and property-holders of the city, by whom it has been cordially recommended. It is earnestly supported by the Board of Trade. It has received large subscriptions to its capital stock, and has met with a singularly hearty and almost unanimous support from all classes of our citizens. The petition now before us is the largest in number and wealth of its signers ever presented to the city corporation. The Board of Trade unanimously recommend the adoption of the ordinance, and the people eagerly press it upon our favorable consideration.

The road will open up extensive and wholly new fields for the enterprise of our merchants. It will traverse a very large and most extraordinarily rich section of cotton lands. It will secure a shorter connection with St. Louis and the North-west. It will place us in direct connection with the whole system of trans-Mississippi railways extending through the States of Arkansas, Northern Texas, Missouri, and Kansas. The road will also constitute a branch of the Southern Pacific Railroad.

Our city is the nearest and most convenient seaport to all that vast North-western country, and we have but to place ourselves in direct communication with it to reap vast results.

The eyes of our merchants are already turned in that direction. To-day we have begun to supply that great region with West-India and South-American products. With our railroad connections in that direction complete, our harbor cleared of obstructions, he would be a bold man who could presume now to prescribe limits to the extent of the trade and commerce which, with energy and foresight, must fall to our share. The public mind, almost universally, has reached this conclusion, and there is a settled conviction that this road is a necessity—that the failure to press it forward to a speedy conclusion would be a public calamity. In this view the undersigned members of your committee heartily concur.

Your committee were directed, by joint resolution, to inquire whether the aid asked for could be extended without exceeding the limit of taxation (two per cent) prescribed by the constitution.

The undersigned have given a fair and full consideration to this subject. They have called for and examined carefully the estimates for carrying on the city government, and for providing for all the obligations already incurred and now proposed, and the result attained by them is as follows:

That the current year is provided for under the $1\frac{3}{4}$ per cent levy; that all the floating debt of the city has been paid off, and there still remains in the treasury $170,000 of the bonds lately authorized. Of the amount, $170,000, on hand, $100,000 may be applied to meet and provide for maturing bonds of the city.

We would recommend this disposition of the bonds remaining unsold and not otherwise needed. This will relieve the treasury of considerable payments annually, on account of maturing bonds.

Your committee find that there is in the treasury a cash balance of over $80,000. The debt which the city has now outstanding is comprised as follows:

Funded debt A, B, and C, at 5 per cent interest.....		$574,000
Annual interest required.....	$28,700	
Funded debt D, E, and F, at 8 per cent interest.....		252,300
Annual interest required.....	20,184	
Aid Mobile and G. N. R. R., at 8 per cent interest.....		352,000
Annual interest required.....	28,160	
Aid Grand Trunk Railroad at 8 per cent interest.....		500,000
Annual interest required.....	40,000	
Wharf Bonds, at 8 per cent.....		360,000
Annual interest required.....	28,800	
Funded debt 1871, at 8 per cent.....		230,000
Annual interest required.....	18,400	
Total debt.....		$2,268,300
Total annual interest.....	$164,244	

As stated before, your committee find the current needs of the city for this year provided for. In future years there must be provided the interest on the outstanding debt and the current expenses of the city government. The annual interest is, all included, $164,244.

To which must be added current expenses, which were estimated for this year at $297,800. It is expected that reductions from estimates may be made in future years; but whether the estimate be much reduced or not, your committee can see no reason for the estimate being *exceeded* for many years to come, and hence take it as a basis of calculation.

There must then be provided, annually hereafter, interest.....	$164,244
Current expenses.....	297,800
	$462,044

To meet this, the city is authorized to levy an annual tax of 2 per cent. Our present taxable valuation is $20,376,916, and your committee can not doubt but that this will be at least maintained hereafter under the impetus of the great works of internal improvement now inaugurated here. Taking this as the taxable basis, 2 per cent will produce annually $407,538.

It must be borne in mind that while the particular levy of any one year is rarely or never entirely collected in that year, yet the collections are ordinarily from year to year the same, and what is short any one year of the current assessment, is made up from back taxes of years previous. Your committee find the correctness of the estimate from licenses and fees confirmed, and are assured that at least that amount, $100,656, may be relied upon, or may be exceeded with increased business here in future years.

This added to the general tax, and we have an annual income of $508,194, to which must be added $1856 interest on county bond held by the city, giving a total income of $510,050, or $48,006 in excess of amount annually required to pay current city expenses on a full estimate, and all interest accruing on bonds now out.

In the interest estimate is included interest on the wharf bonds, which your committee think should be met by income from that property.* If this be done, the net annual excess of revenue over disbursements will be increased by $28,800, making a net surplus of $76,806 annually.

It is confidently believed that the Mobile and Montgomery Railroad Company will next year pay interest on the preferred stock held by the city, which would augment our revenues and increase this net surplus; but no account is now made of this, nor is there any account taken of the increase

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* Since the date of this report, an ordinance has been passed and become a law providing for a system of dockage and wharfage amply large enough to meet the interest on these "Wharf Bonds," and to provide a sinking fund to pay the principal at maturity, besides keeping wharves in repair.

of wealth, population, and basis of taxation to follow immediately the progress of these works which the city has heretofore so wisely fostered.

There is yet to be issued $1,000,000 of bonds to the Grand Trunk Railroad, and this covers the entirety of our liabilities. How soon these will all be issued depends upon rapidity of construction of the road. Our contract provides, however, that we shall pay the amount of three years' interest upon those bonds. On the million, it will amount to $240,000, which will certainly be extended over the next five or six years. Now we are assured of a clear annual surplus, even on basis of present values, of $76,806, which, in six years, would aggregate $460,836, or nearly double the entire amount of interest, additional to that provided for in the foregoing calculations, which we are under contract to pay on account of the Grand Trunk Railroad, and enough to meet fully the entire interest on the aid asked by the Mobile and North-western Railroad Company. Your committee therefore finding that, even on present values, and not considering the added wealth, population, and business prosperity which all may confidently look for if these railroads are built, and these work-shops located here, and which must produce an increased income to the city, there will be a sufficient surplus arising from 2 per cent tax to fully provide for the interest on the bonds asked for by the Mobile and North-western Railroad Company, and petitioned for by the representatives of so large a majority of the property-holders of the city; and believing that this enterprise in the importance of its promised results to the great future of our city demands at our hands a liberal encouragement, do recommend that the aid asked by said company be granted.

It is highly important that the aid should be extended at once. The State of Mississippi has granted the road a bonus of $4000 per mile for the whole length of road, upon condition that twenty-five miles of road in that State be completed by the first of September, 1872. This practically requires about fifty-five to sixty miles of road to be completed from this place by that date, and great energy and promptitude of action is necessary to secure that aid. The company have also county aid pledged to them to the extent of $3,000,000, equal to $8000 a mile. The aid by this ordinance is equivalent in its credit to about $3000 per mile, making in all aid to the amount of $15,000 per mile, besides large subscriptions of money and lands by individuals in Mississippi, and a land-grant by that State, estimated at nearly a million of acres.

Our ordinance does not authorize the delivery of the bonds but as the road advances, and one hundred miles out from Mobile must be built before the last $250,000 of bonds can be called for.

The undersigned report back the ordinance with the following amendments, which have been inserted in the appropriate places:

1. That the tax-payer shall receive scrip for stock to the amount of his tax paid.

2. That in case the company do not pay principal and interest after three years, then the tax-payers shall have preferred stock to the amount of tax paid.

3. That the principal office, freight and passenger depots, and work-shops shall be within the city limits.

JAMES BOND,
O. B. FISH,
JAMES MCDONNELL,
W. T. MARSHALL.

Statement of City Auditor.

The following correspondence explains itself, and will be read with interest by every one, as it has official authority :

Office Mobile and North-western R. R. Co., }
Mobile, Ala., June 8, 1871. }

W. E. Jennings, Esq., *City Auditor :*

Several publications with various and widely different figures, each purporting to represent the true financial condition of the city, as regards its ability to grant the aid asked for by the Mobile and North-western Railroad Company, have appeared in the city papers. With the view of giving the public a correct idea of how the matter stands, I have to request that you will furnish me with a complete and carefully prepared statement of the liabilities and estimated receipts and expenditures of the city for 1872, and subsequent two or three years, during which this railroad interest would have to be paid.

Respectfully, your obedient servant, Thomas Henry,
President Mobile and North-western Railroad Company.

Auditor's Office, }
Mobile, June 9, 1871. }

Thomas Henry, Esq., *President Mobile and North-western Railroad Company :*

In compliance with your request, I take pleasure in handing you, herewith, a statement of the liabilities of the city for the year 1872; and my estimate of the current expenses and probable amount of revenue for the same year.

You will perceive, by my statement of indebtedness, that I have *assumed* that prior to the 1st of January, 1873, $1,000,000 of the bonds will have been delivered to the Mobile and Alabama Grand Trunk Railroad Company, and the coupons on that amount will be due. If, however, the amount should only be $750,000, the amount of coupons to be paid on that account will be reduced $10,000. The coupons on "wharf bonds" are also included in the statement; and should the corporate authorities adopt a system by which the property will be self-sustaining, there will be a further reduction of $28,800, showing $38,800 less to be paid from the current receipts of the treasury.

In estimating the "current expenses," I have been sufficiently liberal to require but a moderate degree of economy in the administration of our city affairs, and the estimates are capable of being reduced $10,000 to $15,000.

Very little legislation is necessary on the part of the authorities to realize fully the estimates I have made of receipts from miscellaneous sources, and may increase it fully $10,000.

It is expected that the Mobile and Montgomery Railroad Company will pay interest on the preferred stock held by the city, ($536,000.) I have placed it at 6 per cent. Should it pay 8 per cent, that item will be increased $10,720.

The assessment of taxable property for 1871 was $20,376,916. I am fully satisfied, and I also have the assurance of the City Assessor, that for 1872 he can reach $25,000,000 with less trouble than he had in 1871. I have assumed $23,000,000; should it reach $25,000,000, that item will be increased $40,000.

In making the estimates, I have endeavored to use the *maximum* for expenses, and the *minimum* for revenue, and the former *can* and *may be* reduced $20,000 to $40,000, and the latter increased $30,000 to $60,000.

In the figures I have made, I do not pretend to accuracy, as you are well aware that would be impossible to attain. I only profess to approximate "near enough for all practical purposes," and am fully satisfied that nothing short of extravagance, which we can not presume, can reduce my estimate *margin* below $75,000 to $100,000, and that a rigid and strict system of economy may increase it to $150,000 or $190,000, which will be ample to pay the interest on $1,500,000 or $2,000,000 of additional bonds.

In relation to subsequent years, it requires more prophetic skill than I can pretend to, to enable me to express an opinion in relation thereto.

I have witnessed the "ups and downs" of Mobile for more than forty years, and am constrained to say that in all that time I have never known the "out-look" for the future of our city more promising than at present.

An impetus is pervading our entire community; the despondency and gloom which paralyzed the efforts of our people have been dispelled; they are rising in their might; and who can predict the result of the efforts of a powerful people, or measure the strength of a giant?

I have the honor to be, very respectfully and truly, yours,

W. E. JENNINGS, *Auditor.*

STATEMENT OF THE INDEBTEDNESS OF THE CITY OF MOBILE FOR THE YEAR 1872.

Bonds account, funded debt A, B, C, due 1st July	$16,800 00	
Coupons on same, 1st July	13,932 50	
Coupons on same, 1st January, 1873	13,512 50	
		$44,245
Bonds account, funded debt, D, E, F, due 1st July	$8,200 00	
Coupons on same, 1st July	10,103 00	
Coupons on same, 1st January, 1873	9,780 00	
		28,088
Bonds account, Mobile and Great Northern Railroad, due 1st January, 1873	$16,000 00	
Coupons on same, 1st July	13,760 00	
Coupons on same, 1st January, 1873	13,440 00	
		43,200
Coupons on bonds account, Grand Trunk Railroad, on $750,000, due 1st July	$30,000 00	
On $1,000,000 due 1st January, 1871	40,000 00	
		70,000
Coupons on wharf bonds, due 1st May	$14,400 00	
Coupons on same, due 1st November	14,400 00	
		28,800
Coupons on bonds of funded debt, of 1871, due 1st July.	$16,000 00	
Coupons on same, due January 1st, 1873	16,000 00	
		32,000
Total amount bonds and coupons		$246,333

W. E. JENNINGS, *Auditor.*

MOBILE, June 9, 1871.

ESTIMATE OF THE AMOUNT OF REVENUE TO BE DERIVED BY THE CITY OF MOBILE IN THE YEAR 1872.

From rent of public property and markets	$40,000
From fees for licenses	75,000
From fees of offices	1,500
From police fines	10,000
From interest on County Bond	1,856
From interest on stock in Mobile and Montgomery Railroad, $536,000, at 6 per cent	32,160
From taxes for 1872, assessment of $23,000,000 at 2 per cent	460,000
Total revenue	$620,516

ESTIMATE OF CURRENT EXPENSES OF THE CITY OF MOBILE FOR 1872.

City officers	$26,000
Police Department	84,000

Street Department	$30,000	
Fire Department	35,000	
City Hospital	30,000	
Public lamps	12,000	
Public grounds and property	4,000	
Commissions	10,000	
	$261,000	
Amount of bonds and coupons	246,333	507,333
Surplus or margin		$113,183

W. E. JENNINGS, *Auditor.*

MOBILE, June 9, 1871.

APPENDIX D.

REPORT OF GEN. A. A. HUMPHREYS, CHIEF-ENGINEER, U. S. ARMY, ON THE YAZOO DELTA OR MISSISSIPPI BOTTOM, THROUGH THE ENTIRE LENGTH OF WHICH, NEAR THE MIDDLE, THE MOBILE AND NORTH-WESTERN RAILROAD WILL RUN. (SEE MAP.)

This report is extracted from the elaborate work of Messrs. Humphreys and Abbott, U. S. Corps Topographical Engineers, who made an extended survey of the entire Mississippi River and valley.

YAZOO BASIN.

The Yazoo basin consists of the Yazoo bottom and its water-shed. . . Its total area is 13,850 square miles.

The Yazoo bottom is a tract of alluvial land of an oval shape, bordering on the Mississippi between Memphis and Vicksburg, and constituting the western portion of the basin. . . . . .

Mr. L. Harper, the State Geologist of Mississippi, estimates the area of the Yazoo bottom in Mississippi at 7092 square miles. . . . . .

This region is not entirely alluvial. The operations of this survey, together with reliable information communicated by persons residing in the bottom-lands, show that it is traversed by a line of high lands some two to six miles in width, which are very rarely, if ever, overflowed. They extend from Honey Island to Delta, on the Mississippi, separating the Yazoo and Tallahatchie rivers from the Sunflower. The soil is different from that of the rest of the bottom, and the ridge is believed, for many reasons, to be the true prolongation of Cowley's Ridge, which has heretofore been supposed to terminate at Helena. The area of this belt of high land, as nearly as it can be estimated, is about 310 square miles.

The entire basin, therefore, consists of

Bottom-lands, liable to be submerged	6,800	square miles.
Ridges in bottom-lands	310	" "
Lands draining into bottom	6,740	" "
Total basin of Yazoo River	13,850	" "

TOPOGRAPHY OF THE BOTTOM-LANDS.

In its general features, this region is a vast, densely timbered plain, sloping from the Mississippi River toward the east, at a mean rate of about 0.4 of a foot per mile, according to the levels run by Mr. Pattison's party near its middle parallel, and sloping from north to south at a mean rate of about 0.6 of a foot per mile, as deduced from the fall of the Mississippi between Memphis and Vicksburg.

The natural system of drainage of this region is very favorable to its protection against overflow, and to the conversion of the swamp lands into cultivable ground. Parallel to the tertiary hills which form the eastern border of the bottom, and but a few miles distant from them, is found the main stream. It is known successively as the Coldwater River, as the Tallahatchie River, and finally as the Yazoo River, and is a fine navigable stream. It receives many tributaries from the hills, the principal being the Coldwater, the Tallahatchie, the Yock-na-pa-ta fa, and the Yalabusha. Until very recently (1852?) it was connected with the Mississippi by the Yazoo Pass, a large bayou, which left the river about ten miles below Helena; but a levee is now built across this inlet. While the Yazoo flows nearly south, it receives comparatively little of the drainage of the swamp lands west of it; but when it bends toward the Mississippi, in the lower part of its course, its volume is soon augmented by the contribution of a system of large swamp-drains or bayous. The principal of these are the Sunflower River, Deer Creek, and Steele's Bayou; but there are many others, which, under different names, connect the various cypress swamps and winter lakes of the interior. These channels, with the single exception of McKinney's Bayou, which empties into the Mississippi just above Stirling, all drain away from the Mississippi to the Yazoo River, with a general southerly course. They were formerly annually overflowed by water which left the Mississippi through innumerable bayous, whose beds varied from fifteen to five feet below the level of the natural banks of that river. This water, in annually filling and spreading over the banks of the great swamp-drains, deposited its sediment upon them, and thus formed a system of high banks or natural levees, extending in a general direction from north to south through the swamps. The annual supply of sediment-bearing water is now cut off by the Mississippi levees, except in great flood years, but the natural swamp levees remain and serve a useful end in restricting the limits of overflow when crevasses do occur. (Thus in the April rise of 1858 the high banks of Deer Creek almost entirely protected the swamps east of them from Mississippi water.)

The natural advantages presented by this system of drainage for protecting the country from overflow are apparent. The whole region is supplied with natural drains having ample slope to carry off its downfall, provided the Mississippi water can be excluded. Since none of these drains discharge into the Mississippi, they do not prevent a continuous chain of levees upon its banks. Lastly, even if a few crevasses do occur, the water poured into the swamps is confined by natural levees to comparatively narrow belts of land, and large areas are thus left unflooded.

GEOLOGY OF THE BOTTOM-LANDS.

It is impossible to give detailed information respecting the character of the soil, etc., of the greater part of the Yazoo bottom, since the region has been very little explored, and what little information has been collected has not been published. The route from the hills east of Greenwood, *viâ* McNutt to Prentiss, on the Mississippi River, has, however, been carefully examined by a party of this survey in charge of Mr. H. A. Pattison. Besides running transit and level lines across the swamp, this party collected a great deal of information concerning it, which forms the basis of this account. The line surveyed crossed the bottom near its middle parallel of latitude, and probably gives a fair general idea of the whole.

From the tertiary hills to the Yazoo River, near the route surveyed, the surface soil is dark alluvial earth, underlain by a stratum of gravel, similar to that of the hills, but less coarse. The roads become so solid after a rain that the shoes of the horses hardly make any impression upon them. Between Yazoo River and McNutt the character of the soil is identical with that just described. From McNutt to Sunflower River, underlying the vegetable mould and the alluvion, is a stratum of dark heavy clay, which, when exposed, is called "buckshot" land by the settlers, from its fancied resemblance to leaden balls, when it has been baked and cracked by the sun. Strata of

blue clay frequently crop out in low places. After passing Tompkins's Bayou, the soil contains much lime; so much, indeed, as to whiten leaves lying upon it after a rain. The Sunflower River itself is very strongly impregnated with lime. At low water it is of a dark green color, and very transparent. It evidently receives its water in part from limestone or mineral springs, the latter of which abound on the eastern border of the bottom-lands. From Sunflower River to Jones's Bayou the soil is generally similar to that between Sunflower and McNutt, but in some places it begins to resemble more nearly the deposit from Mississippi water. Between Jones's Bayou and the Mississippi, the surface soil is composed of this deposit.

The surface soil in Bolivar and Washington counties is reported to be black mud, with some calcareous marl. Limestone waters are unquestionably found in these counties.

To ascertain the nature of the sub-soil, inquiries were made respecting the strata pierced in digging wells, etc. No great variation was found in different parts of the swamp. At Greenwood, many wells were examined. For 2 or 3 feet a dark-colored, alluvial stratum is penetrated; then a layer of heavy red and yellow clay, some 18 or 20 feet thick; then blue clay, from 2 to 4 feet thick; then coarse gravel, which is water-bearing. At McNutt, the upper stratum, some 2 or 3 feet thick, is the ordinary surface soil; next is a stratum of light red sand and clay, some 20 or 30 feet thick. Frequently strata of blue clay, from 2 to 5 feet thick, are encountered 16 or 20 feet below the surface, and at this depth sticks and leaves are met with. At Sunflower River, the surface soil is about 10 feet thick; then comes a stratum of light red clay, some 6 or 7 feet thick. At 32 feet below the surface, a stratum of clear white sand with water is found. At Bogue Falaya, wells are not used, and cisterns only have been dug. The soil is light and sandy for some 10 or 20 feet, and then blue mud is found. At Bluck's mill, near the mouth of Yazoo River, a well has been dug through a stratum of hard clay containing many sticks and leaves. At 40 feet below the surface, a layer of quicksand was reached, which rose several feet in the well, and prevented further progress. At Mr. Blake's plantation, 10 miles above the mouth of Yazoo River, and bordering upon the hills, the strata pierced are surface soil, clay and sand, gravel—often containing large trees—and, lastly, blue clay, which is some 12 or 14 feet below the surface. This blue clay underlies all the hills. These hills contain much gravel and limestone, and often rest upon strata of sand. Near Lake Washington, some 5 miles from the Mississippi, a sycamore-tree, in a state of perfect preservation, is said to have been found at a depth of 40 feet below the surface.

The beds of Yazoo and Sunflower Rivers are both composed of the same kind of blue clay as that which forms the bed of the Mississippi, and, what is a singular and interesting fact, the bottoms of these three rivers are all upon the same absolute level where crossed by the line of the survey.

The preceding facts seem to warrant the conclusion that the alluvial soil of the entire region, *which is unsurpassed in fertility*, is underlain by a stratum of clay, varying from 20 to 40 feet in thickness, and resting upon a stratum of gravel or sand.

GROWTH ON THE BOTTOM-LANDS.

There are three classes of land in the Yazoo bottom: the "high" land, which is rarely overflowed; the "middle" land, which is overflowed during the wet season; and the low "cypress" swamps, parts of which always contain water.

The high land sustains a growth of heavy cane, gum, white-oak, white, black, and red hickory, holly, spicewood, dogwood, sassafras, walnut, and pecan.

The middle land is covered with ash, gum, over-cup oak, black-oak, and hackberry.

The low swamps contain cypress, many varieties of water oaks, privets, box-elder, hackberry, and swamp-ash. The cypress swamps, which are found in

all parts of Yazoo bottom, are from 2 to 10 feet deep at low water. The deepest parts, near the middle, are usually without timber. They are unquestionably the remains of lakes which have been annually filling up by deposit from the Mississippi River.

The timber between Greenwood and McNutt, on the line of the survey, is rather small, owing probably to the stiff nature of the soil. From McNutt to Bogue Falaya, the route traverses an almost unbroken canebrake. Oak, hickory, and other trees common to the swamp, are scattered through this cane, and where the soil is especially rich, the growth is luxuriant, resembling tropical vegetation.

The size of some of the swamp trees is enormous. One cypress log was rafted out which was 84 feet long, and 5 feet 4 inches in diameter at the smaller end. Another was sawed at Mr. Black's mill 60 feet long and 5 feet 1 inch in diameter at the smallest place.

FLOODS IN THE BOTTOM-LANDS.

Full and exact information relative to overflow was collected on Mr. Pattison's level and transit survey through the Yazoo bottom. In Appendix F will be found a table giving the depth at high water, 1858, at station 1000 feet apart on this line, which extends entirely across the middle part of the region, from the hills to the Mississippi River, a distance of 72.5 miles. East of Bogue Falaya, the line was run twice, as a check against errors, and tested thoroughly. The mean depth of overflow on this whole route at high water, 1858, was 2.35 feet. If about 12 miles not overflowed be deducted, the mean depth on the remaining part of the line, which, of course, includes all land actually submerged, was 3.08 feet. The deepest overflow was between Bogue Falaya and Jones's Bayou, where the mean depth for the 10 miles was 5.5 feet, the maximum being 12.5 feet. . . .

ESTIMATED SECTION OF YAZOO BOTTOM.

LOCALITY.	Distance.	Mean Overflow.
Greenville to Deer Creek	10 miles.	2 feet.
Deer Creek to Bogue Falaya	5 "	2 "
Bogue Falaya to Indian Bayou	12 "	4 "
Indian Bayou to Sunflower	7 "	0 "
Sunflower to McNutt	25 "	4 "

Making a total distance of 59 miles, with a mean overflow for the whole distance of 3.01 feet. . . .

In 1858, the swamps were impassable from rain-water before the Mississippi rose. Even on the 1st of January, this was the case on the route between Prentiss and McNutt, and the survey of the line was for this reason deferred until low water. During the spring, the Yazoo and its tributaries were within 5 feet of extreme high water. There were two distinct overflows in the swamp, one in April of very short duration, the other in June and July. The latter was much the higher of the two, and covered on July 15th, as already seen, 6800 square miles of the swamp to a mean depth of about 3.0 feet. It was probably the deepest overflow which occurred since the flood of 1828, although not very different from those of 1850 and 1851.

* * * * * * *

YAZOO RIVER.

This river is in many respects a peculiar stream. It flows near the eastern part of Yazoo bottom, from its northern to its southern extremity, being known as Coldwater River until joined by the Tallahatchie, and then as Tallahatchie River until joined by the Yalabusha. Below the latter junction it as-

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sumes its proper name, Yazoo River. The total length of this stream, from its proper source, Horn Lake, to the Mississippi, is about 500 miles. At its high stage, it is navigable for steamboats drawing 5 or 6 feet of water, as far as Panola, on Tallahatchie River, and as far as Grenada, on Yalabusha River. It is navigable for boats drawing from 2 to 3 feet water as far as Greenwood, a distance of 240 miles, at all seasons of the year. Its average high-water width below Greenwood is about 850 feet. Its high-water cross-section is, near Greenwood, 17,000 square feet, and just below the mouth of Steele's Bayou, 50,000 square feet, the difference being mainly due to the swamp tributaries. Its range at Greenwood is 36 feet; at Yazoo City, 35 feet; and at its mouth, 48 feet. Its total fall at high water, from Greenwood to its mouth, is shown by the levels of this survey to be about 40 feet, giving a mean slope per mile, in this distance, of 0.16 of a foot. Its current is sluggish, rarely exceeding 3 miles per hour below Greenwood, even in the swiftest part of the stream. . . .

The floods of the Yazoo River proper, exclusive of the Mississippi water, are irregular in the time of their occurrence. There is generally, however, a flood in February and March, and often another in the autumn. The river is usually low from June to December.

The Mississippi levees have already effected a great change in the regimen of the river.

Formerly, even as recently as 1850, the Mississippi began to pour into the swamp in large quantities when fully 10 feet below high water. This water filled up the bottom-lands and passed through the innumerable drains to Yazoo River, causing it to *discharge uniformly a great volume of water back into the Mississippi, even at the top of the highest floods.* This fact is established by the direct evidence of many who speak from personal knowledge. It was particularly noted in 1828 and 1850, when the velocity of the current in Yazoo River is stated by eye-witnesses to have exceeded even that of the Mississippi itself. . . .

At present, as long as the Mississippi levees remain unbroken, the Yazoo is backed up so as to become dead-water (sometimes even for 70 miles) during rapid rises of the Mississippi. If there happen, however, to be freshets in some of its tributaries, the Yazoo may maintain its discharge even in very rapid rises of this river, as, for instance, in the December rise of 1857, during the whole of which a moderate downward current was observed. Sometimes, but very rarely, there is an upward current of Mississippi water, which has been known to extend 40 miles up the river. . . .

INDIAN MOUNDS, ETC.

Indian mounds are to be found through the entire bottom. They are evidently artificial, being composed of the ordinary swamp soil, and containing bones, articles of pottery, etc. These mounds are especially numerous near Sunflower River, as are also Indian burial places. In one locality, the caving of the river bank has exposed many human bones and other relics of the former occupants of this region. The great age of these mounds may be inferred from the fact that some of the largest trees of the region are now growing upon them. On the banks of the Yazoo River many shell mounds exist. They are above overflow, and are made of the shells of fresh-water mussels, such as are now found in the river. No traditions relative to their origin are preserved among the Indian tribes of the present day. Old fortifications are also reported to exist in the swamps, but none were examined by the parties of this survey.